describe insuring that, following a request for quote is acted on by returning a quote, that the service representative is prompted to complete an order.

Claim 8, element b - language

- "a self management subsystem configured to assist a salesperson in managing sales information."

Claim 8, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 8, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 10 lines 63-65: "The last option available on the system is maintenance of the parameters for the system maintained at the personal computer 12."
>
> Col. 11 lines 1-14: "The first option available if system maintenance is to be performed is to create set up files indicated by program step 140. These are the files used to set parameters for printing and formatting of the submittal reports to be prepared for particular customers. ... Another system maintenance option available is to edit and create product IDs indicated at program step 148."

Claim 8, element b - my analysis of the Long '354 Patent

See claim elements missing from Claim 1.

The Long '354 Patent does not perform the claim element: "a self management subsystem configured to assist a salesperson in managing sales information."

Among other things, the Long '354 Patent does not contain a self management subsystem. The '525 Patent describes a self management subsystem as follows

> "The self management component 110 assists sales personnel to manage their opportunities, time, contacts, schedules, goals, tasks, etc." ['525 Patent, 6:30-32]

There is no description of such a subsystem in the Long '354 Patent.

VI.B. Claim 10 in view of the Long '354 Patent

Claim 10, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 10, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 10, element a - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 3 lines 27-34: "A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."
>
> Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. ... A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

Claim 10, element a - my analysis of the Long '354 Patent

> See claim elements missing from Claim 1.
>
> See discussion for Claim 5a which is incorporated herein by reference.

Claim 10, element b - language

- "a sales management subsystem configured to assist a sales manager in managing a plurality of salespeople." "

Claim 10, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 10, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 6 lines 6-16: "Because many sales representatives will deal repetitively with the same customers, and because the creation of a submittal form for a particular customer may require a significant amount of time and effort, the system then allows, at program step 40, for the sales representative to save a file on disk storage with the file consisting of a set up file containing information on the custom fields necessary for a submittal document prepared in accordance with the wishes of the particular customer."

Claim 10, element b - my analysis of the Long '354 Patent

See claim elements missing from Claim 1.

The Long '354 Patent does not perform the claim element: "a sales management subsystem configured to assist a sales manager in managing a plurality of salespeople."

Among other things, the Long '354 Patent does not contain such a sales management subsystem "to assist a sales manager in managing a plurality of salespeople."

VI.B. Claim 12 in view of the Long '354 Patent

Claim 12, element a - language

- "[A system as recited in Claim 1, wherein the plurality of subsystems comprises:] a lead management subsystem configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and"

Claim 12, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 12, element a - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 3 lines 27-34: "A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."
>
> Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. ... A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

Claim 12, element a - my analysis of the Long '354 Patent

See claim elements missing from Claim 1.

The Long '354 Patent does not describe a "lead management subsystem". See discussion for Claim 5b which is incorporated herein by reference.

Claim 12, element b - language

- "a self management subsystem configured to assist a salesperson in managing sales information."

Claim 12, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 12, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 10 lines 63-65: "The last option available on the system is maintenance of the parameters for the system maintained at the personal computer 12."
>
> Col. 11 lines 1-14: "The first option available if system maintenance is to be performed is to create set up files indicated by program step 140. These are the files used to set parameters for printing and formatting of the submittal reports to be prepared for particular customers. ... Another system maintenance option available is to edit and create product IDs indicated at program step 148."

Claim 12, element b - my analysis of the Long '354 Patent

> See claim elements missing from Claim 1.
>
> The Long '354 Patent does not describe a "self-management subsystem". See discussion for Claim 8b which is incorporated herein by reference.

VI.B. Claim 20 in view of the Long '354 Patent

Claim 20, preamble - language

- "A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:"

Claim 20, preamble - construction

- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, preamble - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this preamble is as follows:

The preamble is not a limitation, nonetheless col. 1 lines 7-13: "... present invention relates to systems for pricing and ordering goods... so that sales representatives can obtain pricing information, and place orders for the goods to be manufactured..."

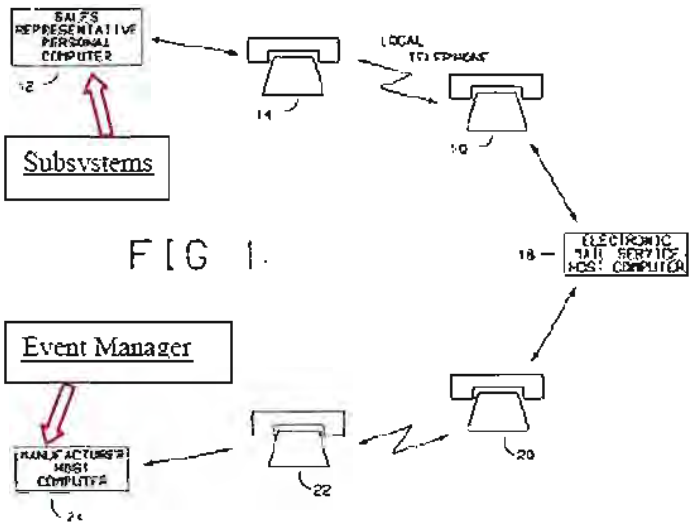


FIG 1.

Col. 3 lines 27-34:

"A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."

Col. 2 lines 38-45: "...a central data processing facility connected to a telecommunication link to an electronic mail service host, a remote station for a sales representative... an electronic mail serving host,... the manufacturing host..."

Claim 20, preamble - my analysis of the Long '354 Patent

My analysis of the preamble for this method Claim is the same as my analysis for the preamble and Claim 1, element a combined.

Claim 20, element a - language

- "automatically detecting one or more changes in state characteristic of an event occurring in the sales process;"

Claim 20, element a - construction

- "Changes in state characteristic of an event" - "a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system.

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element a - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

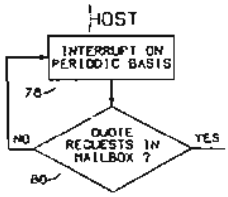
> Co. 9 Lines 5-10: "...software embedded in step 80 [host] ...looks for mail placed in its mailbox."
>
> Col 10 Lines 21-24: "...the manufacturer host...during its polling of requests and other items placed in its mailbox, senses that an order has been placed..."

Claim 20, element a - my analysis of the Long '354 Patent

My analysis of this element is the same as my analysis for Claim 1, element b.

The material differences between this element and the "detecting" of Claim 1, element b are that Claim 20 has the additional limitation of "automatically" detecting, and it involves detecting state changes in events occurring in the sales process, as opposed to Claim 1 which involves detecting state changes of events occurring in the system.

The actual event detected in the Long '354 Patent is the arrival of an email. Since the email (representing a request for quote or an order) arrives in its respective mailbox, the system arguably knows how to process this. So the event detected is not per se a sales event but just an email arrival event – well-understood in prior art (as described in Section I.G). Higher level software is then called to process the already known kind of message. The relevant portion of Figure 2B is shown below as are quotes that describe the operation of the system:



"A preferred method of implementation is for the manufacturer host to have assigned to it at least two electronic mailboxes, one assigned to receive requests for quotations and one assigned to receive orders. [4:6-10]

"Periodically on a fixed time period basis, such as once every twenty minutes, the manufacturer host computer 24 accesses the mail service host 18 through its telephone connections 20 and 22 to interrogate its mailbox to determine if any messages have been left for it. The manufacturer host computer 24 then downloads the file containing the items and product IDs together with information identifying the sales representative who has submitted the request." [4:31-40]

"When such [a periodic] inquiry is made, the program then proceeds to program step 80 in which it is inquired if there are any quote requests in the mailbox for the manufacturer host." [8:63-66]

"At the manufacturer, the manufacturer host computer, during its periodic polling of requests and other items placed in its mailbox, senses that an order has been placed in its electronic mailbox and downloads the order at program step 112. Then the manufacturer host proceeds to verify the accuracy of the order at program step 114 and, assuming that it is accurate, prints the order for scheduling and credit approval at 116 resulting in an order number 118 in hard copy. A copy of the hard copy printout from step 118 is sent to the sales representative to confirm receipt and processing of the order." [10:20-32]

Claim 20, element b - language

- "Inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and"

Claim 20, element b - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

- "Inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs."
>
> Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stocks, which have product ID selections listed"
>
> Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item."
>
> Col. 10 Lines 24-26: "The manufacturer host proceeds to verify the accuracy of the order..."

Claim 20, element b - my analysis of the Long '354 Patent

My analysis of this element for this method Claim is the same as my analysis for system Claim 1, element c.

Claim 20, element c - language

- "automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context."

Claim 20, element c - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element c - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 9 Lines 17-24: "The manufacturer host can reassemble the file as a price quoted for transmittal... Again the quote is transmitted into the electronic mail system."
>
> Col 10 Lines 27-29: "The manufacturer host...prints the order for scheduling and credit approval"

Claim 20, element c - my analysis of the Long '354 Patent

> My analysis of this element is the same as my analysis for Claim 1, element d.

VI.B. Claim 24 in view of the Long '354 Patent

Claim 24 - language

- "A method as recited in Claim 20, wherein the inferred context includes information related to at least one phase of the sales process."

Claim 24 - construction

- "context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 24 - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 20 chart incorporated by reference]
>
> Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs."
>
> Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stocks, which have product ID selections listed"
>
> Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item."
>
> Col. 10 Lines 24-26: "The manufacturer host proceeds to verify the accuracy of the order..."

Claim 24 - my analysis of the Long '354 Patent

> See claim elements missing from Claim 20.
>
> See discussion for Claim 2 which is incorporated herein by reference.

VI.B. Claim 34 in view of the Long '354 Patent

Claim 34, element a - language

- "[A method as recited in Claim 20, further comprising the steps of:] inferring occurrence of an event while converting a lead to a buying customer; and"

Claim 34, element a - construction

- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 34, element a - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 20 chart incorporated by reference]
>
> Col. 3 lines 27-34: "A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."
>
> Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. ... A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

Claim 34, element a - my analysis of the Long '354 Patent

See claim elements missing from Claim 20.

See discussion for Claims 2 and 5b which are incorporated herein by reference. In Long '354, there is no event described that converts a lead to a buying customer which involves "inferring occurrence of an event," that is, following a ["logical process by which the fact that an event has occurred is derived by application of logical rules"].

Furthermore, this claim element requires a lead, but, in the Long '354 Patent, a consumer who chooses to make a purchase cannot properly be called a lead.

Claim 34, element b - language

- "using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales."

Claim 34, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 34, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 3 lines 27-34: "A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."
>
> Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. ... A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

Claim 34, element b - my analysis of the Long '354 Patent

See claim elements missing from Claim 20.

The Long '354 Patent does not perform this claim element: "using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales." There is no description of using the Long '354 system to "convert an existing customer into a lead, so as to generate repeat sales."

VI.B. Claim 35 in view of the Long '354 Patent

Claim 35, element a - language

- "[A method as recited in claim 20, further comprising the steps of:] inferring occurrence of an event while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and"

Claim 35, element a - construction

- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 35, element a - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 20 chart incorporated by reference]
>
> Col. 3 lines 27-34: "A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."
>
> Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. ... A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

Claim 35, element a - my analysis of the Long '354 Patent

> See claim elements missing from Claim 20.
>
> See discussion for Claim 34a which is incorporated herein by reference.

The Long '354 Patent does not perform "prompting the buying customer to make a buying decision, so as to close a sale." Indeed, the Long '354 Patent does not even properly describe insuring that, following a request for quote is acted on by returning a quote, that the service representative is prompted to complete an order.

Claim 35, element b - language

- "using the particular subsystem to assist a salesperson in managing sales information."

Claim 35, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 35, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 10 lines 63-65: "The last option available on the system is maintenance of the parameters for the system maintained at the personal computer 12."
>
> Col. 11 lines 1-14: "The first option available if system maintenance is to be performed is to create set up files indicated by program step 140. These are the files used to set parameters for printing and formatting of the submittal reports to be prepared for particular customers. ... Another system maintenance option available is to edit and create product IDs indicated at program step 148."

Claim 35, element b - my analysis of the Long '354 Patent

See claim elements missing from Claim 20.

The Long '354 Patent does not perform "using the particular subsystem to assist a salesperson in managing sales information." See discussion for Claim 12b which is incorporated herein by reference.

VI.B. Claim 37 in view of the Long '354 Patent

Claim 37, element a - language

- "[A method as recited in Claim 20, further comprising the steps of:] inferring occurrence of an event while converting a lead to a buying customer; and"

Claim 37, element a - construction

- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 37, element a - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 20 chart incorporated by reference]
>
> Col. 3 lines 27-34: "A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."
>
> Col. 10 lines 37-45: "Another option available within the system available to the sales representative on his personal computer 12 is to print what is called a submittal report. ... A submittal report is a form for submission to the customer in the customer's own desired format and style that is, in essence, a bid on a particular job or project."

Claim 37, element a - my analysis of the Long '354 Patent

> See claim elements missing from Claim 20.
>
> See discussion for Claims 34a which is incorporated herein by reference.

Claim 37, element b - language

- "using the particular subsystem to assist a sales manager in managing a plurality of salespeople."

Claim 37, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 37, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 6 lines 6-16: "Because many sales representatives will deal repetitively with the same customers, and because the creation of a submittal form for a particular customer may require a significant amount of time and effort, the system then allows, at program step 40, for the sales representative to save a file on disk storage with the file consisting of a set up file containing information on the custom fields necessary for a submittal document prepared in accordance with the wishes of the particular customer."

Claim 37, element b - my analysis of the Long '354 Patent

See claim elements missing from Claim 20.

The Long '354 Patent does not perform "using the particular subsystem to assist a sales manager in managing a plurality of salespeople." See discussion for Claim 10b which is incorporated herein by reference.

VI.B. Claim 40 in view of the Long '354 Patent

Claim 40, preamble - language

- "A computer implemented sales system used to facilitate a sales process, the system comprising:"

Claim 40, preamble - construction

The Court has not construed this preamble. My analysis construes the terms of this preamble in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, preamble - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this preamble is as follows:

> The preamble is not a limitation, nonetheless col. 1 lines 7-13: "... present invention relates to systems for pricing and ordering goods... so that sales representatives can obtain pricing information, and place orders for the goods to be manufactured..."

Claim 40, preamble - my analysis of the Long '354 Patent

My analysis of this preamble is the same as my analysis for Claim 1, preamble.

Claim 40, element a - language

- "a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and"

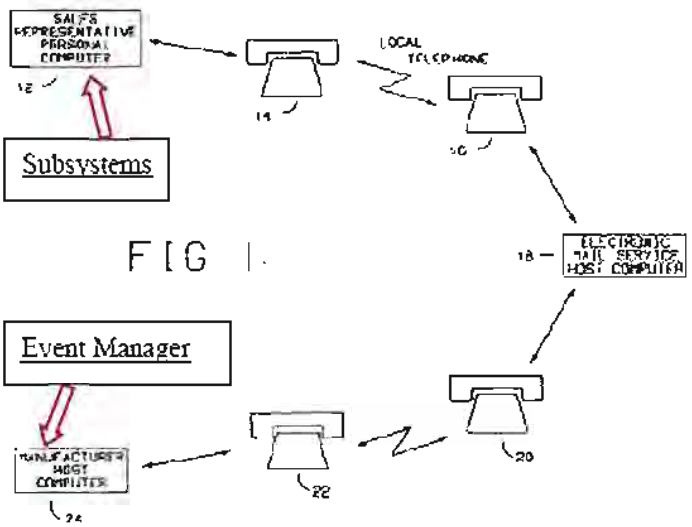
Claim 40, element a - construction

- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element a - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:



Col. 3 lines 27-34:

"A variety of sales representatives in the field are each equipped with a personal computer 12 having processing capabilities, local memory and long term storage such as disk drives. Those personal computers 12 may be installed at the office locations of the sales representatives or may be portable units which they may carry with them to their home or other remote locations."

Col. 2 lines 38-45: "...a central data processing facility connected to a telecommunication link to an electronic mail service host, a remote station for a sales representative... an electronic mail serving host,... the manufacturing host..."

Claim 40, element a - my analysis of the Long '354 Patent

My analysis of this element is the same as my analysis for Claim 1, element a.

Claim 40, element b - language

- "an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,"

Claim 40, element b - construction

- "Event manager" - "hardware and/or software";
- "Subsystem" - "a system that is part of a larger system";
- "Changes in state characteristic of an event" - "a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system.

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element b - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 2 lines 38-45: "...a central data processing facility connected to a telecommunication link to an electronic mail service host, a remote station for a sales representative... an electronic mail serving host,... the manufacturing host..."
>
> Col. 9 Lines 5-10: "...software embedded in step 80 [host] ...looks for mail placed in its mailbox."
>
> Col. 10 Lines 21-24: "...the manufacturer host...during its polling of requests and other items placed in its mailbox, senses that an order has been placed..."

Claim 40, element b - my analysis of the Long '354 Patent

> My analysis of this element is the same as my analysis for Claim 1, element b.

Claim 40, element c - language

- "Infer occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,"

Claim 40, element c - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element c - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 40-41: "The host computer 24 can then calculate out pricing information based on the items and product IDs."
>
> Col. 8 lines 1-3: "Similarly, a manufacturer may maintain a list of standard items available on forty-eight hour stocks, which have product ID selections listed"
>
> Col. 9 Lines 14-16: "The manufacturer host can then decode each item on the quote and price each item."
>
> Col. 10 Lines 24-26: "The manufacturer host proceeds to verify the accuracy of the order..."

Claim 40, element c - my analysis of the Long '354 Patent

> My analysis of this element is the same as my analysis for Claim 1, element c.

Claim 40, element d - language

- "Link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and"

Claim 40, element d - construction

- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element d - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 9 Lines 17-24: "The manufacturer host can reassemble the file as a price quoted for transmittal... Again the quote is transmitted into the electronic mail system."
>
> Col 10 Lines 27-29: "The manufacturer host...prints the order for scheduling and credit approval"

Claim 40, element d - my analysis of the Long '354 Patent

The '354 Patent does not meet this Claim element: "Link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system,"

The '354 Patent always takes the same actions when it processes the two "events" of processing requests for quotes and orders. It does not link an event with an action "based on prior sales experience using the sales system."

Claim 40, element e - language

- "Automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be performed based on the inferred context."

Claim 40, element e - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";

- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element e - analysis by Dr. Cook of the Long '354 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 9 Lines 17-24: "The manufacturer host can reassemble the file as a price quoted for transmittal... Again the quote is transmitted into the electronic mail system."
>
> Col 10 Lines 27-29: "The manufacturer host...prints the order for scheduling and credit approval"

Claim 40, element e - my analysis of the Long '354 Patent

> My analysis of this element is the same as my analysis for Claim 1, element d.

VI.C U.S. PATENT NO. 4,567,359 TO LOCKWOOD (THE "LOCKWOOD '359 PATENT")

VI.C General Overview of the Lockwood '359 Patent

Reference for the Lockwood '359 Patent

- L. Lockwood, "Automatic Information, Good and Services Dispensing System," US Patent 4,567,359, Filed: May 24,1984, Issued: Jan. 28, 1986

Claims at Issue

The Cook Report states that "Lockwood U.S. Pat. No. 4,567,359 anticipates asserted 1-3, 5-7, 20, 24, 34, and 40." (Cook Report, p81)

Dr. Cook's Summary of the Lockwood '359 Patent (quoted from his Expert Report)

"143. This patent describes a computerized system applied to many types of customer service and sales industries that includes one or more self-service and sales terminals; for example, to automatically dispense insurance quotations and policies. The system includes a central data processing center acting as an event manager and coupled to various subsystems, such as remote insurance company terminals, transaction terminals, motor vehicle service bureaus, and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy executions.

"144. The central processor detects changes in state, such as, for example, receipt of an insurance quote request. The processor logically infers the type of quote requested.

"145. Upon the inferred occurrence of this event, certain contexts within the system become relevant; namely, the appropriate insurance rating information necessary to facilitate the action of calculating insurance cost calculations and generating of policies. The relevant rating information inferred as relevant is based at least in part on the detected changes of state (i.e., receipt of an insurance quote request). The operation automatically initiated in a subsystem is the location of the applicable insurance rating information in respective insurance company terminal subsystems."

My Summary of the Lockwood '359 Patent

The pre-Web Lockwood '359 Patent describes a central system with remote customer "self-service terminals" (kiosks equipped a "fictitious agent," with video and audio feeds, a speech synthesizer and touchpad) that could be located at banks, super markets, and shopping

malls that enable end-user customers to use the remote terminals to access information on goods and services, for instance, car insurance rate quotations and comparisons among providers, and to place orders for such service and pay with credit cards. The information from service providers is updated daily. Information is elicited from end-user customers in dialog consisting of a conventional sequence of interactions in multiple languages (e.g., English and Spanish).

Dr. Cook's Analysis of the Lockwood '359 Patent from his Expert Report p 32-22 (quoted)

> 142. I considered and analyzed U.S. Patent No. 4,567,359 ("the '359 Patent"). The '359 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.
>
> 143. This patent describes a computerized system applied to many types of customer service and sales industries that includes one or more self-service and sales terminals; for example, to automatically dispense insurance quotations and policies. The system includes a central data processing center acting as an event manager and coupled to various subsystems, such as remote insurance company terminals, transaction terminals, motor vehicle service bureaus, and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy executions.
>
> 144. The central processor detects changes in state, such as, for example, receipt of an insurance quote request. The processor logically infers the type of quote requested.
>
> 145. Upon the inferred occurrence of this event, certain contexts within the system become relevant; namely, the appropriate insurance rating information necessary to facilitate the action of calculating insurance cost calculations and generating of policies. The relevant rating information inferred as relevant is based at least in part on the detected changes of state (i.e., receipt of an insurance quote request). The operation automatically initiated in a subsystem is the location of the applicable insurance rating information in respective insurance company terminal subsystems.
>
> 146. The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the Claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-7, 20, 24, 34, and 40 of the '525 Patent are anticipated by the '359 Patent under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted Claims are obvious in view of the '359 Patent, either alone or in combination with other references herein.
>
> 147. A detailed analysis of how this reference anticipates and/or renders obvious the asserted Claims of the '525 Patent is provided in Appendix C, pages 81-108.

Relevance of the Lockwood '359 Patent to the '525 Patent

The objective of the Lockwood '359 Patent is to automate a single task in the sales process. An end-user customer uses an automated dialog at a kiosk located in a public place to request, review and compare (insurance) quotes and place orders. The Lockwood '359 Patent does not mention *event*, *rule*, *inference*, or *context*.

Cook describes that the Lockwood patented system changes state when it receives an insurance quote event – but it only receives such quotes when it asks for them. Cook describes the system using contexts like an insurer's rating in preparing a quotation – but again this simple use of pre-existing information is not based on rules or inference. Instead, the Lockwood '359 Patent describes a system that uses conventional technology as known in the prior art, not one that uses contextual events or inference.

In summary, unlike the '525 Patent, the Lockwood '359 Patent fails to provide integrated sales force automation system consisting of a system of sales subsystems. It automates one step in the sales process – removing the sales force from being involved.

In addition, the '359 Patent is similar to, and hence cumulative to, much of the prior art that was before the examiner during the prosecution of the '525 Patent. For example, the '359 Patent is cumulative to the following systems which, I understand, were developed by the assignee of the '525 Patent – Clear with Computers: (i) the ISIS System, which was of record during the prosecution of the '525 Patent; and (ii) the Truck Force Tools System which was of record during the prosecution of the '525 Patent. Further, the '359 Patent is very similar to and cumulative to United States Patent No. 4,359,631 (which was also invented by Lawrence Lockwood – the inventor of the '359 Patent) which was considered by the examiner during the prosecution of the '525 Patent. In addition, the '868 Patent is similar to, and hence cumulative

to, much of the prior art that was before the examiner during the prosecution of the '525 Patent. Finally, the '868 Patent is cumulative to a number of the United States Patents that were considered by the examiner during the prosecution of the '525 Patent.

VI.C. Claim 1 in view of the Lockwood '359 Patent

Claim 1, preamble - language

- "A computer implemented sales system used to facilitate a sales process, the system comprising:"

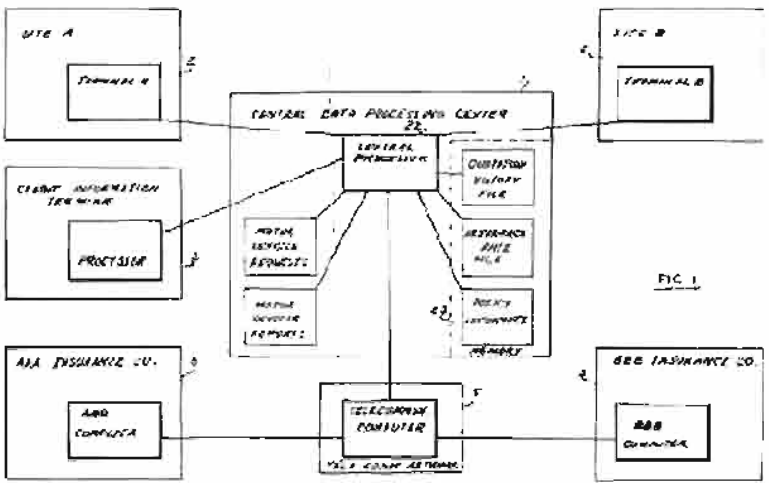
Claim 1, preamble - construction

The Court has not construed this preamble. My analysis construes the terms of this preamble in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, preamble - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this preamble is as follows:

> The preamble is not a limitation, nonetheless abstract: "A system for automatically dispensing information, goods and services to a customer on a self-service basis including a central data processing center in which information on services offered by various institutions in a particular industry is stored."



> Col. 3, lines 62-68: "FIG. 1 shows an overview of an automatic system for dispensing insurance quotations and policies according to a preferred embodiment of the invention. It will be understood that such a system can be used in a variety of other service-oriented industries, such as the travel industry, catalogue sales industry, various financial services, and the like."
>
> Col. 9 lines 13-19: "The system of this invention allows a customer quick and easy access to insurance quotations from several companies, and allows the customer to make a selection and purchase insurance on a self-service basis. All the necessary operations of obtaining information, checking credit, transmitting information to the respective companies and issuing policies, are carried out automatically."
>
> Col. 9 lines 32-35: "It will be clear that this system may be applied to many other types of customer service and sales industries. Some examples are the travel industry, many types of financial services, and catalogue sales industries."

Claim 1, preamble - my analysis of the Lockwood '359 Patent

The Court has not construed this preamble: "A computer implemented sales system used to facilitate a sales process, the system comprising:"

The preamble serves to remind the reader that the '525 Patent is directed at aiding sales personnel in a sales force by integrating a collection of sales subsystems:

> "The present invention is directed to a sales force automation system and, more particularly, to an automated sales system which facilitates the sale of an item or service by intelligently integrating into a single system tools used by a salesperson in the sales process." ['525 Patent, 1:5-9]
>
> "Most conventional sales systems have been implemented in a limited manner and are typically directed solely to a particular event, task or small subset of tasks in the sales process. Such systems are constructed by examining a particular sales event and by developing an automated tool to assist the salesperson confronted by the particular event. Such systems are individually developed without regard for other events occurring in the overall sales process in which the salesperson is engaged. As a result, conventional systems fail to provide full support for the salesperson." ['525 Patent, 1:10-19]

By contrast, the Lockwood '359 Patent is for a self-serve kiosk that could be placed at malls for instance and used to by end-users wanting insurance quotes – before the Web brought this capability into the home. The Lockwood '359 Patent is not a tool that would be used by the sales force except for the narrow use of providing insurance quotes and making related sales.

Claim 1, element a - language

- "a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and"

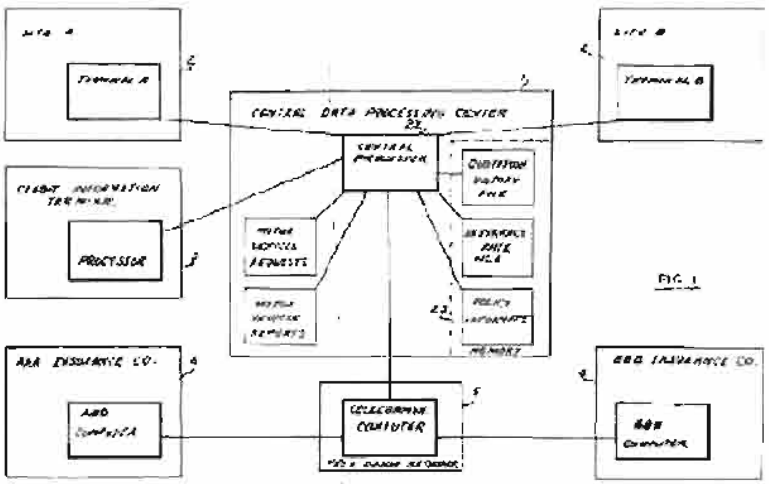
Claim 1, element a - construction

- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element a - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:



See col. 5, lines 37-55;

Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."

Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card." "A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution."

> Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 1, element a - my analysis of the Lockwood '359 Patent

The Lockwood '359 Patent arguably performs this Claim element: "a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process;".

The objective of the Lockwood '359 Patent is to automate a single task in the sales process. An end-user customer uses an automated dialog at a kiosk located in a public place to request, review and compare (insurance) quotes and place orders.

Claim 1, element b - language

- "an event manager, coupled to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system,"

Claim 1, element b - construction

- "Subsystem" - "a system that is part of a larger system";
- "Event manager" - "hardware and/or software";
- "Changes in state characteristic of an event" - "a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element b - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4, lines 1-7: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals

2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system. The terminals are all linked to the central data processing center by any suitable remote links"

Col. 6, lines 51-65: "As seen in FIG. 4, the customer is asked (34) to select the type of insurance quotation desired (e.g. automobile 35, homeowner 36, life 37 or health 38). When the type of insurance is selected, a series of pertinent questions (39) for that type of insurance is asked, such as age, gender, marital status, and so on. The customer enters responses (40) on the touch pad, and the responses are shown on the monitor screen and repeated by the voice synthesizer for customer verification. Each valid answer is stored (41) until all necessary information has been gathered. If at any stage, no answer is received (42) within a predetermined time limit (e.g. about 15 seconds), the program assumes that the customer has left the terminal and returns to the ready state 24 to wait for the next customer."

Col. 7, lines 5-10: "Once all the necessary information has been gathered at the terminal (see 44), the processing unit 14 auto-dials the central data processing center 1 (see 45, FIG. 5), sends the gathered information to the center (46) and waits to receive an insurance quotation from each participating company."

See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 1, element b - my analysis of the Lockwood '359 Patent

The Lockwood '359 Patent performs this Claim element: "an event manager, coupled to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system,"

The Lockwood '359 Patent meets the Claim element by providing an event manager ("hardware or software") that is coupled to subsystems of a sales system and that "detects" (somehow, unknown) "one or more changes in state characteristic of an event occurring within the system" (requests for insurance quotes or orders).

Claim 1, element c - language

- "Inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and"

Claim 1, element c - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element c - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 1, element c - my analysis of the Lockwood '359 Patent

The Lockwood '359 Patent does not perform this Claim element: "Inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state".

The Lockwood '359 Patent does not mention *event*, *trigger*, *rule*, *inference*, or *context* and the only mention of *detection* is to detect the presence of a customer entering the kiosk via a

photo sensor device. Dr. Cook argues that the central data processing center is an event center that processes events like requests for insurance quotations. The customer initiates a dialog with the remote kiosk to formulate a request for quote or order message that is sent to a central processing site where it is processed in a conventional manner. Cook describes that the Lockwood patented system changes state when it receives an insurance quote – but it only receives such quotes when it asks for them. Cook describes the system using contexts like an insurer's rating in preparing a quotation – but again this decision is not based on rules, inference or context.

Claim 1, element d - language

- "automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context."

Claim 1, element d - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Subsystem" - "a system that is part of a larger system";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element d - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first

> determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 1, element d - my analysis of the Lockwood '359 Patent

The Lockwood '359 Patent does not perform this Claim element: "automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context."

While the operations of responding to a requesting an insurance quote result in the system providing a quote, these actions are not initiated based on inferred context as explained in Claim 1, element c.

VI.C. Claim 2 in view of the Lockwood '359 Patent

Claim 2 - language

- "[A system as recited in claim 1,] wherein the inferred context includes information related to at least one phase of the sales process."

Claim 2 - construction

- "context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 2 - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 2 - my analysis of the Lockwood '359 Patent

The Lockwood '359 Patent does not perform this claim element: "wherein the inferred context includes information related to at least one phase of the sales process."

Among other things, while it is clear that, in the Lockwood '359 Patent, information relevant to a sales transaction (e.g., related to insurance rates) is passed among subsystems of the sales system, there is no evidence from the Cook Report or the Lockwood '359 Patent that context ["information already existing within the system that becomes relevant upon the occurrence of an event"] was *inferred* using a "logical process by which a factual conclusion is derived from known facts by the application of logical rules". The Lockwood '359 Patent does not describe an event manager that "detect[s] . . . *infer[s]* . . . and automatically initiat[es] an operation" as required by Claim 1 or that any inference step that is part of an event takes place.

VI.C. Claim 3 in view of the Lockwood '359 Patent

Claim 3 - language

- "[A system as recited in claim 1,] wherein the inferred context includes information related to whether a previous event has occurred in the sales process.

Claim 3 - construction

- "context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 3 - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 3 - my analysis of the Lockwood '359 Patent

The Lockwood '359 Patent does not perform this claim element: "wherein the inferred context includes information related to whether a previous event has occurred in the sales process."

Among other things, while it is arguable that, in the Lockwood '359 Patent, a previous event (e.g., the basis for insurance rates) can result in a later event (like the system offering an insurance quote), there is no evidence from the Cook Report or the Lockwood '359 Patent that context ["information already existing within the system that becomes relevant upon the occurrence of an event"] was *inferred* using a "logical process by which a factual conclusion is

derived from known facts by the application of logical rules". The Lockwood '359 Patent does not describe an event manager that "detect[s] . . . infer[s] . . . and automatically initiat[es] an operation" as required by Claim 1 or that any inference step that is part of an event takes place.

VI.C. Claim 5 in view of the Lockwood '359 Patent

Claim 5, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 5, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 5, element a - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."
>
> Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."
>
> "A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution."
>
> Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at

> various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 5, element a - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 1.

The Lockwood '359 Patent performs some of the function of the '525 Patent's "time with customer" subsystem:

> "The time with customer component receives necessary information, for example, pricing and financing data from the data component, and stores information obtained during the time spent with the customer, such as the customer's particular needs and desires in the databases of the data component 116." ['525 Patent, 5:24-30]

For instance, the Lockwood '359 Patent enables a prospective customer to receive insurance quotes, compare, and possibly purchase insurance.

However, there is a presumption in the '525 Patent that the system is aiding a salesperson who is part of a sales force. For instance,

> "while the salesperson is using the time with customer component 104" ['525 Patent, 11:32-33]

In the Lockwood '359 Patent, there is no salesperson.

Furthermore, this claim element requires a lead, but, in the Lockwood '359 Patent, a consumer who chooses to make a purchase cannot properly be called a lead.

Claim 5, element b - language

- "a lead generation subsystem configured to convert a name to a potential customer."

Claim 5, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 5, element b - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."
>
> Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."
>
> "A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution"
>
> Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 5, element b - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 1.

The Lockwood '359 Patent does not perform the claim element: "a lead generation subsystem configured to convert a name to a potential customer."

Among other things, the Lockwood '359 Patent does not contain a lead generation subsystem. The '525 Patent describes a lead generation subsystem as follows

> "The lead generation component 102 is provided to assist sales personnel to identify leads, to generate qualified leads and to begin the sales process. The lead generation component may include, for example, automated systems designed to assist the sales personnel in carrying out such tasks as telemarketing, kiosk presentations, trade show demonstrations, database marketing, electronic advertising, etc. ['525 Patent, 4:22-27]

Among other things, the Lockwood '359 Patent does not "convert a name to a potential customer" as required by this claim element, since the customer is already known.

VI.C. Claim 6 in view of the Lockwood '359 Patent

Claim 6, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 6, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 6, element a - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."
>
> Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."
>
> "A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution"
>
> Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 6, element a - my analysis of the Lockwood '359 Patent

> See claim elements missing from Claim 1.

See discussion for Claim 5a which is incorporated herein by reference.

Claim 6, element b - language

- "an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold."

Claim 6, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 6, element b - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 8, lines 35-39: "A policy data file (81) is created for all policies issued for each company in that particular day's processing. This file is sent to the appropriate insurance company computer terminal 4 via Telenet® to be input to their automated billing system."

Claim 6, element b - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 1.

The Lockwood '359 Patent does not perform the claim element: "an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold."

Among other things, the Lockwood '359 Patent does not contain an order management subsystem. The '525 Patent describes an order management subsystem as follows

> "The order management component 106 assists sales personnel in efficiently managing the critical sales process phase that encompasses the time between the purchase decision and the time the product or service is delivered. For some products or services, this could be a short period of time, while for others it may be many months or even years. The order management component 106 allows the sales personnel to electronically manage changes and provide needed information to the customer during this critical time." ['525 Patent, 5:31-39]

The Lockwood '359 Patent aids in making a sale but provides no description of after-sale follow-up.

VI.C. Claim 7 in view of the Lockwood '359 Patent

Claim 7, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 7, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 7, element a - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."
>
> Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."
>
> "A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution."
>
> Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is

transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 7, element a - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 1.

See discussion for Claim 5a which is incorporated herein by reference.

Claim 7, element b - language

- "a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales."

Claim 7, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 7, element b - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."

Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."

"A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution."

Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 7, element b - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 1.

The Lockwood '359 Patent does not perform the claim element: "a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales."

Among other things, the Lockwood '359 Patent does not contain a customer retention subsystem. The '525 Patent describes a customer retention subsystem as follows

> "A further core process component of preferred system 100 is the customer retention component 108. This component assists sales personnel during the phase of the sales process after delivery of the service or product purchased by the customer. Component 100 assists sales personnel in retaining a customer; this is accomplished through processes that ensure a customer remains satisfied with the purchase decision and that increase repeat sales opportunities." ['525 Patent, 5:65-6:5]

Furthermore, this claim element requires a lead, but in Lockwood '359 Patent, consumers who choose to use the system themselves cannot properly be called leads.

VI.C Claim 20 in view of the Lockwood '359 Patent

Claim 20, preamble - language

- "A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:"

Claim 20, preamble - construction

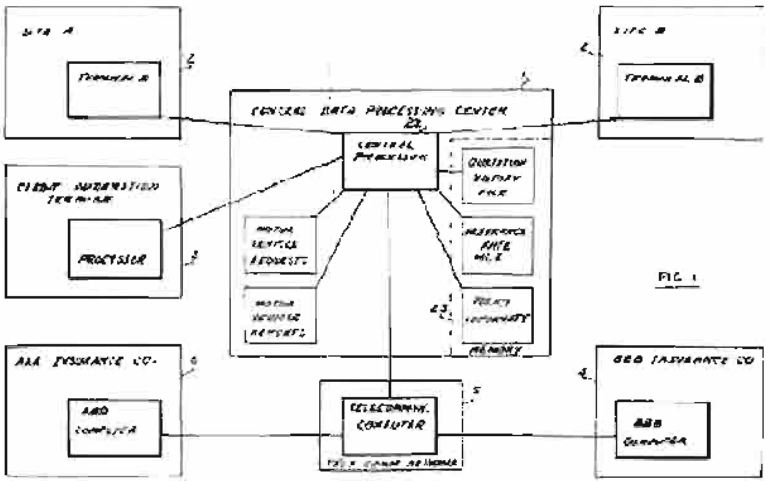
- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, preamble - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this preamble is as follows:

The preamble is not a limitation, nonetheless abstract: "A system for automatically dispensing information, goods and services to a customer on a self-service basis including a central data processing center in which information on services offered by various institutions in a particular industry is stored."



Col. 3, lines 62-68: "FIG. 1 shows an overview of an automatic system for dispensing insurance quotations and policies according to a preferred embodiment of the invention. It will be understood that such a system can be used in a variety of other service-oriented industries, such as the travel industry, catalogue sales industry, various financial services, and the like."

Col. 9 lines 13-19: "The system of this invention allows a customer quick and easy access to insurance quotations from several companies, and allows the customer to make a selection and purchase insurance on a self-service basis. All the necessary operations of obtaining information, checking credit, transmitting information to the respective companies and issuing policies, are carried out automatically."

Col. 9 lines 32-35: "It will be clear that this system may be applied to many other types of customer service and sales industries. Some examples are the travel industry, many types of financial services, and catalogue sales industries."

Claim 20, preamble - my analysis of the Lockwood '359 Patent

My analysis of the preamble for this method Claim is the same as my analysis for the preamble and Claim 1, element a combined.

Claim 20, element a - language

- "automatically detecting one or more changes in state characteristic of an event occurring in the sales process;"

Claim 20, element a - construction

- "Changes in state characteristic of an event" - "a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system.

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element a - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4, lines 1-7: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system. The terminals are all linked to the central data processing center by any suitable remote links"
>
> Col. 6, lines 51-65: "As seen in FIG. 4, the customer is asked (34) to select the type of insurance quotation desired (e.g. automobile 35, homeowner 36, life 37 or health 38). When the type of insurance is selected, a series of pertinent questions (39) for that type of insurance is asked, such as age, gender, marital status, and so on. The customer enters responses (40) on the touch pad, and the responses are shown on the monitor screen and repeated by the voice synthesizer for customer verification. Each valid answer is stored (41) until all necessary information has been gathered. If at any stage, no answer is received (42) within a predetermined time limit (e.g. about 15 seconds), the program assumes that the customer has left the terminal and returns to the ready state 24 to wait for the next customer."
>
> Col. 7, lines 5-10: "Once all the necessary information has been gathered at the terminal (see 44), the processing unit 14 auto-dials the central data processing center 1 (see 45, FIG. 5), sends the gathered information to the center (46) and waits to receive an insurance quotation from each participating company."
>
> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 20, element a - my analysis of the Lockwood '359 Patent

> My analysis of this element is the same as my analysis for Claim 1, element b.

The material differences between this element and the "detecting" of Claim 1, element b are that Claim 20 has the additional limitation of "automatically" detecting, and it involves detecting state changes in events occurring in the sales process, as opposed to Claim 1 which involves detecting state changes of events occurring in the system.

The Lockwood '359 Patent does not mention *event*, *trigger*, *rule*, *inference*, or *context* and the only mention of *detection* is to detect the presence of a customer entering the kiosk via a photo sensor device. Interactions between the kiosk and the central data processing center are described as traditional message sending and receiving as known in the prior art (see Section I.G). Dr. Cook does not establish that the Lockwood '359 Patent performs "automatically detecting one or more changes in state characteristic of an event occurring in the sales process".

Claim 20, element b - language

- "Inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and"

Claim 20, element b - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element b - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 20, element b - my analysis of the Lockwood '359 Patent

My analysis of this element for this method Claim is the same as my analysis for system Claim 1, element c.

Claim 20, element c - language

- "automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context."

Claim 20, element c - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element c - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 20, element c - my analysis of the Lockwood '359 Patent

My analysis of this element is the same as my analysis for Claim 1, element d.

VI.C. Claim 24 in view of the Lockwood '359 Patent

Claim 24 - language

- "A method as recited in claim 20, wherein the inferred context includes information related to at least one phase of the sales process."

Claim 24 - construction

- "context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 24 - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

[Claim 20 chart incorporated by reference]

See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating

information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 24 - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 20.

See discussion for Claim 2 which is incorporated herein by reference.

VI.C. Claim 34 in view of the Lockwood '359 Patent

Claim 34, element a - language

- "[A method as recited in claim 20, further comprising the steps of:] inferring occurrence of an event while converting a lead to a buying customer; and"

Claim 34, element a - construction

- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 34, element a - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

[Claim 20 chart incorporated by reference]

Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."

Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."

> "A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution."
>
> Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 34, element a - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 20.

See discussion for Claims 2 and 5b which are incorporated herein by reference. In Lockwood '359, there is no event described that converts a lead to a buying customer which involves "inferring occurrence of an event," that is, following a ["logical process by which the fact that an event has occurred is derived by application of logical rules"].

Furthermore, this claim element requires a lead, but, in the Lockwood '359 Patent, a consumer who chooses to make a purchase cannot properly be called a lead.

Claim 34, element b - language

- "using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales."

Claim 34, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 34, element b - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."

Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."

"A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution."

Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 34, element b - my analysis of the Lockwood '359 Patent

See claim elements missing from Claim 20.

The Lockwood '359 Patent does not perform this claim element: "using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales." There is no description of using this system to create leads for later potential sales.

VI.C. Claim 40 in view of the Lockwood '359 Patent

Claim 40, preamble - language

- "A computer implemented sales system used to facilitate a sales process, the system comprising:"

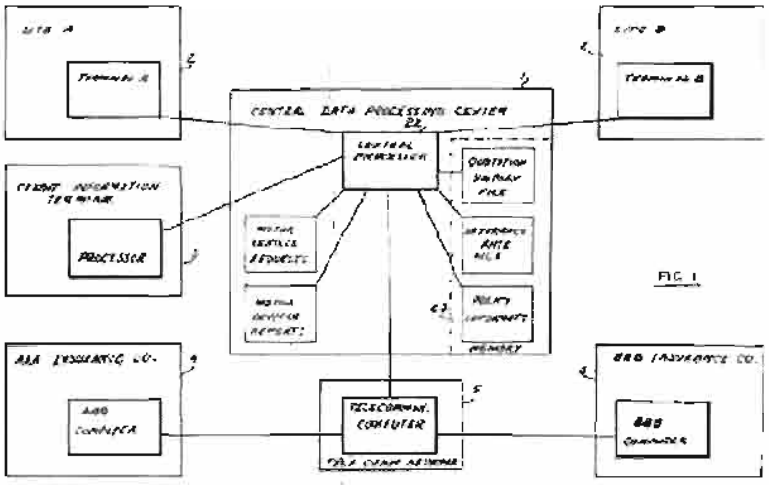
Claim 40, preamble - construction

The Court has not construed this preamble. My analysis construes the terms of this preamble in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, preamble - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this preamble is as follows:

> The preamble is not a limitation, nonetheless abstract: "A system for automatically dispensing information, goods and services to a customer on a self-service basis including a central data processing center in which information on services offered by various institutions in a particular industry is stored."



> Col. 3, lines 62-68: "FIG. 1 shows an overview of an automatic system for dispensing insurance quotations and policies according to a preferred embodiment of the invention. It will be understood that such a system can be used in a variety of other service-oriented industries, such as the travel industry, catalogue sales industry, various financial services, and the like."

> Col. 9 lines 13-19: "The system of this invention allows a customer quick and easy access to insurance quotations from several companies, and allows the customer to make a selection and purchase insurance on a self-service basis. All the necessary operations of obtaining information, checking credit, transmitting information to the respective companies and issuing policies, are carried out automatically."

> Col. 9 lines 32-35: "It will be clear that this system may be applied to many other types of customer service and sales industries. Some examples are the travel industry, many types of financial services, and catalogue sales industries."

Claim 40, preamble - my analysis of the Lockwood '359 Patent

> My analysis of this preamble is the same as my analysis for Claim 1, preamble.

Claim 40, element a - language

- "a plurality of subsystems configured to electronically facilitate actions performed during the sales process; and"

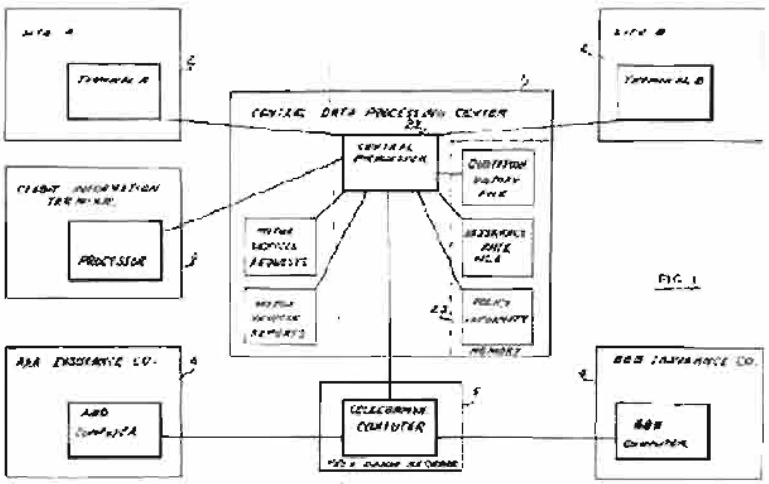
Claim 40, element a - construction

- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element a - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:



See col. 5, lines 37-55;

Col. 4, lines 1-6: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system."

Col. 3, lines 5-8: "The central data processing center is suitably also linked to a remote credit information center for checking the credit of a customer in response to a sales order or charging customer's account via debit card."

"A central data processing center tied to remote insurance company terminals, transaction terminals, motor vehicle service bureaus and credit information and bank terminals for the preparation, verification and forwarding of insurance quotations and policy execution."

> Col. 5, lines 1-12: "A video subsystem 6, which operates to provide video presentations to customers. The presentations solicit and allow the customer to enter information at various points via the touch pad 13 displayed on the monitor screen. Such information is transmitted to peripheral subsystem 7, and eventually to the central data processing center 1."

Claim 40, element a - my analysis of the Lockwood '359 Patent

> My analysis of this element is the same as my analysis for Claim 1, element a.

Claim 40, element b - language

- "an event manager coupled to the subsystems and configured to detect one or more changes in state characteristic of an event occurring in the system,"

Claim 40, element b - construction

- "Event manager" - "hardware and/or software";
- "Subsystem" - "a system that is part of a larger system";
- "Changes in state characteristic of an event" - "a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system.

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element b - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4, lines 1-7: "The system basically comprises a central data processing center 1 linked to various remote terminals, including one or more information and sales terminals 2, a credit information terminal 3, and data processing terminals 4 of various insurance companies served by the system. The terminals are all linked to the central data processing center by any suitable remote links"
>
> Col. 6, lines 51-65: "As seen in FIG. 4, the customer is asked (34) to select the type of insurance quotation desired (e.g. automobile 35, homeowner 36, life 37 or health 38). When the type of insurance is selected, a series of pertinent questions (39) for that type of insurance is asked, such as age, gender, marital status, and so on. The customer enters responses (40) on the touch pad, and the responses are shown on the monitor screen and repeated by the voice synthesizer for customer verification. Each valid answer is stored

(41) until all necessary information has been gathered. If at any stage, no answer is received (42) within a predetermined time limit (e.g. about 15 seconds), the program assumes that the customer has left the terminal and returns to the ready state 24 to wait for the next customer."

Col. 7, lines 5-10: "Once all the necessary information has been gathered at the terminal (see 44), the processing unit 14 auto-dials the central data processing center 1 (see 45, FIG. 5), sends the gathered information to the center (46) and waits to receive an insurance quotation from each participating company."

See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 40, element b - my analysis of the Lockwood '359 Patent

My analysis of this element is the same as my analysis for Claim 1, element b.

Claim 40, element c - language

- "Infer occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,"

Claim 40, element c - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element c - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 40, element c - my analysis of the Lockwood '359 Patent

> My analysis of this element is the same as my analysis for Claim 1, element c.

Claim 40, element d - language

- "Link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system, and"

Claim 40, element d - construction

- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element d - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 40, element d - my analysis of the Lockwood '359 Patent

The Lockwood '359 Patent does not meet this Claim element: "Link the inferred event with an action to be performed during the sales process based on prior sales experience using the sales system,"

The Lockwood '359 Patent does not have an inference mechanism.

Even though Lockwood '359 Patent logs and archives quotations, it does not link an event with an action "based on prior sales experience using the sales system."

Claim 40, element e - language

- "Automatically initiate an operation using one or more of the plurality of subsystems to facilitate the action to be performed based on the inferred context."

Claim 40, element e - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 40, element e - analysis by Dr. Cook of the Lockwood '359 Patent

Dr. Cook's analysis of this element is as follows:

> See col. 7, line 61 – col. 8, line 2: "When the central data processing center receives a quotation request (64) from one of the sales and information terminals 2, it first determines the type of quote requested. The center then locates the appropriate rating information (65) for that type of insurance from the memory, and makes an insurance

calculation (66) for each of a series of different insurance companies based on the information received from the customer. A quotation history file stored in the memory is up-dated (67), and the quotation is sent to the terminal (68)."

Claim 40, element e - my analysis of the Lockwood '359 Patent

My analysis of this element is the same as my analysis for Claim 1, element d.

VI.D U.S. PATENT NO. 5,201,010 TO DEATON (THE "DEATON '010 PATENT")

VI.D General Overview of the Deaton '010 Patent

Reference for the Deaton '010 Patent

- D. Deaton et al., "Method and System for Building a Database and Performing Marketing based upon Prior Shopping History," US Patent 5,201,010, Filed: May 19, 1992, Issued: Apr. 6, 1993

Claims at Issue

The Cook Report states that "Deaton U.S. Pat. No. 5,201,010 anticipates asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40." (Cook Report, p109)

Dr. Cook's Summary of the Deaton '010 Patent (quoted from his Expert Report)

"149. This patent teaches a method and system for performing targeted marking to infrequent shoppers by generating an offer coupon based upon the occurrence of an event (e.g., a transaction involving a customer contact event. The system includes a plurality of subsystems, referred to as transaction terminals, which include an automatic check reader, a bar code reader, and a coupon dispenser. Coupled to the subsystems is a transaction processor, acting as an event manager, that also accesses customer database information.

"150. The transaction terminals are used to transmit a customer information request (e.g., check transaction verification) from the point of sale to the transaction processor. In addition to performing a check verification status, the system collects and accumulates selected and current additional transactional data. Customer data can include frequency of purchases and dollar amounts spent over specified intervals (such as Day/Week/Month/Quarter/Total), along with other historical information such as departments shopped, products purchased and the like.

"151. The transaction processor detects a change of state; for example, detects the transmission of a check transaction verification request. This state change is indicative of an event, such as a purchase transaction or a determination of type of customer. The event manager infers the event through a logical process using rules, for example, inferring the particular store departments in which the purchased products are located, and/or inferring which products or store departments are particularly absent from past or current transactions.

"152. In one aspect, the transaction processor monitors sales activities, for example, assessing whether or not items have been purchased from a meat department, dairy

> department or deli. Triggered by this event and based upon stored customer data, a decision is made whether to award a coupon to the customer, and/or what type of coupon to award. For example, if data within the system indicates over a period of time that a shopper shows a consistent failure to shop at the delicatessen, then certain actions will follow. For example, when the customer's check is scanned into the check reader, the processor interrogates the customer's history and automatically initiates a coupon dispenser subsystem to generate a coupon to induce the customer to shop at the delicatessen. The coupon provided to the customer, the resulting action, is based upon inferred contexts. These contexts include general customer profile data, past purchase and transactional data and associated department identifiers, along with current purchase and transactional data. The change in state detected then forms the basis for the inference of which contexts become relevant upon occurrence of the event."

My Summary of the Deaton '010 Patent

The Deaton '010 Patent can be summarized by its Abstract:

> "A method and system is disclosed for performing targeted marketing on infrequent shoppers. A check reader is provided for automatically reading the MICR code of a plurality of checks drawn on a plurality of different banking institutions. Circuitry detects the customer's checking account number in the MICR code of the checks. A terminal enters data relating to the customer's shopping habits. A database of the store's customers is created in response to the check reader, circuitry for detecting, and terminal. The selection is then made of a list of customers from the database who have not shopped at the store since a preselected date. ['010 Patent, Abstract]

Part of the Specification described the circuitry of the check recognizer and part describes the operation of the system. Another portion of the specification describes generating coupons at the point of sales terminal that the sales clerk can give to the customer based on customer shopping history.

Dr. Cook's Analysis of the Deaton '010 Patent from his Expert Report pp. 33-34 (quoted)

> 148. I considered and analyzed U.S. Patent No. 5,201,010 ("the '010 Patent"). The '010 Patent was "known or used by others" in the United States prior to the October 30, 1994 critical date for the '525 Patent.
>
> 149. This patent teaches a method and system for performing targeted marketing to infrequent shoppers by generating an offer coupon based upon the occurrence of an event (e.g., a transaction involving a customer contact event). The system includes a plurality of subsystems, referred to as transaction terminals, which include an automatic check reader, a bar code reader, and a coupon dispenser. Coupled to the subsystems is a

transaction processor, acting as an event manager, that also accesses customer database information.

150. The transaction terminals are used to transmit a customer information request (e.g., check transaction verification) from the point of sale to the transaction processor. In addition to performing a check verification status, the system collects and accumulates selected and current additional transactional data. Customer data can include frequency of purchases and dollar amounts spent over specified intervals (such as Day/Week/Month/Quarter/Total), along with other historical information such as departments shopped, products purchased and the like.

151. The transaction processor detects a change of state; for example, detects the transmission of a check transaction verification request. This state change is indicative of an event, such as a purchase transaction or a determination of type of customer. The event manager infers the event through a logical process using rules, for example, inferring the particular store departments in which the purchased products are located, and/or inferring which products or store departments are particularly absent from past or current transactions.

152. In one aspect, the transaction processor monitors sales activities, for example, assessing whether or not items have been purchased from a meat department, dairy department or deli. Triggered by this event and based upon stored customer data, a decision is made whether to award a coupon to the customer, and/or what type of coupon to award. For example, if data within the system indicates over a period of time that a shopper shows a consistent failure to shop at the delicatessen, then certain actions will follow. For example, when the customer's check is scanned into the check reader, the processor interrogates the customer's history and automatically initiates a coupon dispenser subsystem to generate a coupon to induce the customer to shop at the delicatessen. The coupon provided to the customer, the resulting action, is based upon inferred contexts. These contexts include general customer profile data, past purchase and transactional data and associated department identifiers, along with current purchase and transactional data. The change in state detected then forms the basis for the inference of which contexts become relevant upon occurrence of the event.

153. The foregoing description is by way of example only and is intended to illustrate, in general terms, the functionality of the described system to provide context. As I discuss in the Claim chart, it is my opinion that under the Court's constructions, the asserted Claims 1-3, 5-8, 10, 12, 20, 24, 34, 35, 37 and 40 of the '525 Patent are anticipated by the '010 Patent under 35 U.S.C. § 102 (a) and (b). It is also my opinion that the remaining asserted Claims are obvious in view of the '010 Patent, either alone or in combination with other references herein.

154. A detailed analysis of how this reference anticipates and/or renders obvious the asserted Claims of the '525 Patent is provided in Appendix C, pages 109-199.

Relevance of the Deaton '010 Patent to the '525 Patent

The Deaton '010 Patent does not use the term *infer* and uses *context* only in a sense unrelated to the '525 Patent (i.e., context switching). The patent uses an *event manager* task but this initiates periodic system activities like system backup, database purge, and cross-database synchronization, not related to sales force automation or inference. The patent also mentions *shopping events* to refer to a conventional purchase by a customer. The term *rule* is used only in one narrow sense to refer to "predetermined arbitration rules" which are used to grade customers as positive, negative, or caution in situations where a customer has received different grades at different stores – these may well be hard-coded. These (irrelevant) rules are not connected to the previously mentioned (and also irrelevant) event manager.

Dr. Cook tenuously maps the language of the '525 Patent to the Deaton '010 Patent so that a purchase transaction becomes an event and the transaction manager an event manager which changes state when a new event arrives. He states in paragraph 152 "Triggered by this event and based upon stored customer data, a decision is made whether to award a coupon to the customer" but this decision is not a logical inference. There is no way described to add rules to the system or to connect it to other sales force automation subsystems as the '525 Patent teaches.

In addition, the '010 Patent is similar to, and hence cumulative to, much of the prior art that was before the examiner during the prosecution of the '525 Patent. For example, the '010 Patent is cumulative to the following systems which, I understand, were developed by the assignee of the '525 Patent – Clear with Computers: (i) the ISIS System, which was of record during the prosecution of the '525 Patent; and (ii) the Truck Force Tools System which was of record during the prosecution of the '525 Patent. In addition, the '868 Patent is cumulative to a

number of the United States Patents that were considered by the examiner during the prosecution of the '525 Patent.

VI.D. Claim 1 in view of the Deaton '010 Patent

Claim 1, preamble - language

- "A computer implemented sales system used to facilitate a sales process, the system comprising:"

Claim 1, preamble - construction

The Court has not construed this preamble. My analysis construes the terms of this preamble in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, preamble - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this preamble is as follows:

> The preamble is not a limitation, nonetheless abstract: "A method and system is disclosed for performing targeted marking on infrequent shoppers."
>
> Col. 3 lines 50-60: "Important aspects of the present invention are to facilitate check transactions by reducing the requirements for customer identification, to enable a store to adopt a risk management approach to check verification based on a customer's transactional history (frequency and dollar volume over specified intervals), and to improve a store's marketing and other customer relations programs by collecting transactional data for that store, both current and historical, that can be used to identify new or infrequent customers, develop customer profiles and to perform targeted marketing."
>
> Col. 9, lines 9-14: "A transaction terminal transmits a request (including a function code identifying the requested function together with other request data) to the transaction processor, which processes the request and returns an appropriate response."

Claim 1, preamble - my analysis of the Deaton '010 Patent

The Court has not construed this preamble. This Report does not take issue with the Dr. Cook Report's assertion that the Deaton '010 Patent discloses a computer implemented sales system used to facilitate a sales process.

Claim 1, element a - language

- "a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process; and"

Claim 1, element a - construction

- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

Claim 1, element a - my analysis of the Deaton '010 Patent

The Deaton '010 Patent performs this Claim element: "a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process;"

The Deaton '010 Patent supports a sales person in one narrow phase of the sales process, at the point of sale, by receiving and verifying customer checks and possibly providing coupons to the customer.

Claim 1, element b - language

- "an event manager, coupled to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system,"

Claim 1, element b - construction

- "Subsystem" - "a system that is part of a larger system";
- "Event manager" - "hardware and/or software";
- "Changes in state characteristic of an event" - "a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 12-28: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor. The transaction processor processes the customer information request, using the check identification number to search the customer database and retrieve the corresponding customer record, if any. Based on the customer information in the customer record, or the lack of a customer record, the transaction processor returns an appropriate response (such as check verification status) and marketing response information to the transaction terminal."
>
> Col. 9 lines 15-21: "For example, in the case of check verification, a transaction terminal is used to transmit a verification request-the customer's check ID, the verification function code, and the dollar amount. The transaction processor processes the request, updates the customer database to reflect that transaction, and returns a customer verification status response."
>
> Col. 31 lines 52-56: "Event-driven activities are performed automatically by the check transaction processing system to implement certain functions without operator intervention. The configuration and timing of these activities is a matter of routine design selection."

Claim 1, element b - my analysis of the Deaton '010 Patent

The Deaton '010 Patent does not perform this Claim element: "an event manager, coupled to the subsystems, the event manager detecting one or more changes in state characteristic of an event occurring within the system,"

The "event-driven activities" and event manager actually mentioned in the Deaton '010 Patent deal with routine, periodic system maintenance activities like system backup, database purge, and cross-database synchronization, not directly to sales force automation.

Dr. Cook asserts that the transaction processor as an event processor. This component processes a customer purchase to be processed, determines if the check is good, and identifies whether to issue the customer a coupon. Dr. Cook does not make a strong case that the component he identifies is an event processor that detects events.

Dr. Cook tenuously maps the language of the '525 Patent to the Deaton '010 Patent so that a purchase transaction becomes an event and the transaction manager an event manager which changes state when a new event arrives. He states in paragraph 152 "Triggered by this event and based upon stored customer data, a decision is made whether to award a coupon to the customer" but this decision is not a logical inference. There is no way to add additional rules to the system to connect it to other sales force automation subsystems as the '525 Patent teaches.

Claim 1, element c - language

- "Inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state, and"

Claim 1, element c - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";

- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element c - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes."
>
> Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations."
>
> Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. A new record is then created in the database for that customer's checking account identification number in response to a processor 110 response indicating the failure to locate, so that the customer's name and address is entered into the record along with a shopping incidence and shopping data being recorded in the database concurrently. A list of customers is then generated in the database whose last transaction

date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

Col. 66 lines 13-19: "Alternatively, the system may use dollar amounts to determine an "infrequent shopper". If the system determines that the cumulative dollars spent at the store by a specified customer is equal to or less than a predetermined dollar level within a predetermined time interval, the specified customer is designated as an "infrequent shopper"."

Col. 66 lines 20-30: "As another alternative, the database is maintained with the shopping history for each unique check identification. Each time the system detects a check with a unique check identification number, it is checked against the database. If the last date shopped is prior to a preselected date, a signal is generated and transmitted to the POS. The check is then marked or set aside to be used to create a mailing list. Alternatively, the signal may be used to prompt the store clerk to disburse incentive coupons at the POS."

Col. 66, lines 32-38: "5.4. Marketing Based On Range Of Last Shopping Dates

As noted above, it would be advantageous to be able to selectively market to infrequent shoppers. FIG. 15 illustrated a database building technique to obtain a list of infrequent shoppers based upon their last shopping date.

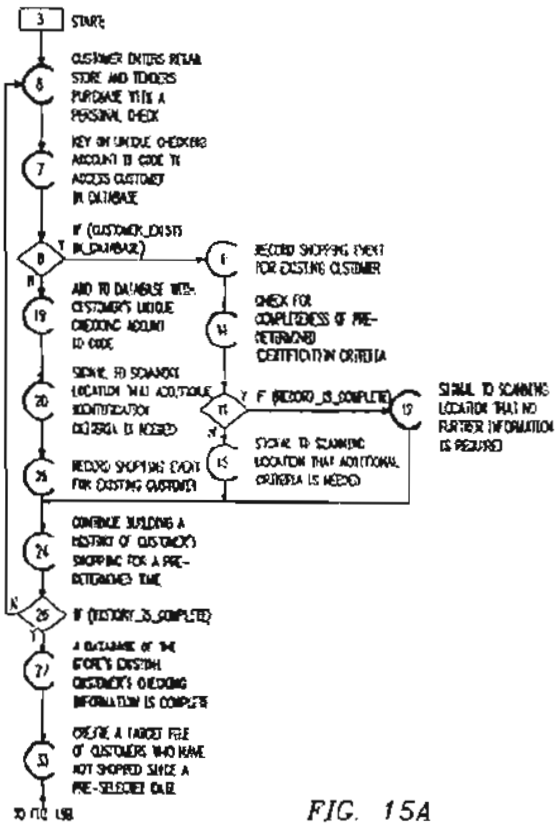
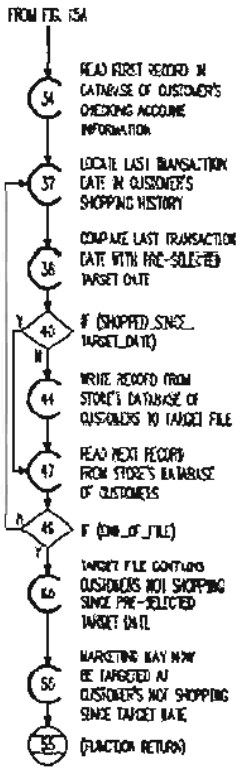


FIG. 15A



FIC. 15B

Col. 66, lines 32-38: "FIG. 16 illustrates a database building technique to provide a list of a store's customers whose last shopping date falls within a preselected shopping date range... In accordance with the techniques shown in FIG. 16, a customer's checking account identification number is entered as a unique customer identification code by the check reader 119. Host processor 110 is programmed to store a database which includes a plurality of unique customer identification codes and check cashing history of prior customers of the retail establishment, including date of check transactions. The processor then compares each newly entered unique customer identification code against the stored database. A signal is generated to indicate the presence of a complete customer information record or of an incomplete customer information record as a result of the comparison. A second database is then generated which lists customers whose last unique customer identification code entry date falls within a preselected date range. A promotion may then be selectively offered by the retail establishment to customers within the second database. For example, coupons or other enticements may be mailed directly to the customers on the second database, or distributed at the POS."

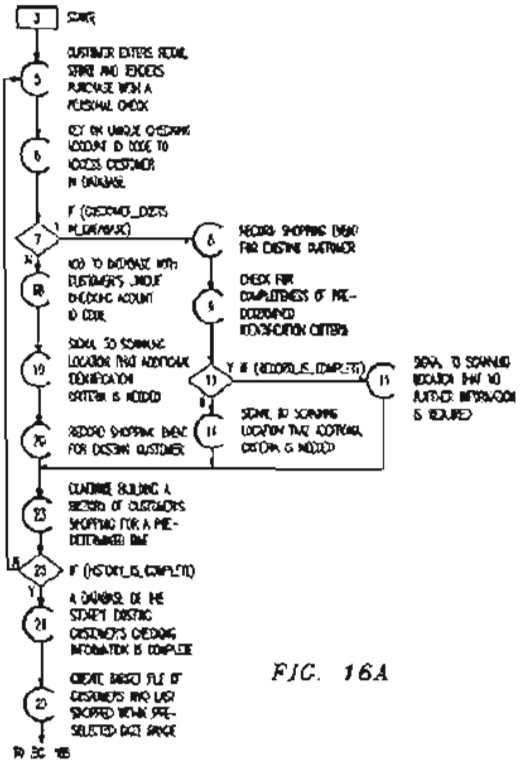


FIG. 16A

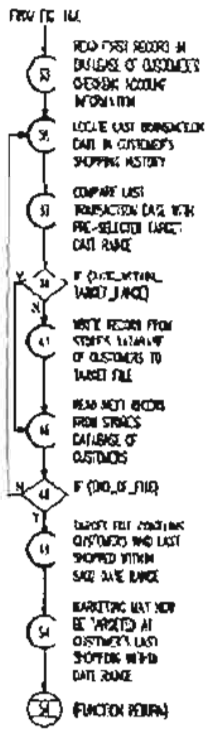


FIG. 16B

Claim 1, element c - my analysis of the Deaton '010 Patent

The Deaton '010 Patent does not perform this Claim element: "Inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state,"

The Deaton '010 Patent does not use the term *infer* and uses the term *context* only in a sense unrelated to the '525 Patent (i.e., context switching). It is unclear from the patent specification that the Deaton system supports event management or any way of "inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state".

Claim 1, element d - language

- "automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context."

Claim 1, element d - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Subsystem" - "a system that is part of a larger system";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 1, element d - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

Col. 52 lines 31-39: "At the appropriate event time, the Event Manager Task spawns the event subtask, which receives (822) the current record from the Event Table. The current event record includes a current event time and an activity pointer to each of up to 10 associated activities identified in the Activity Table. The event subtask sequentially executes each activity associated with the current event time."

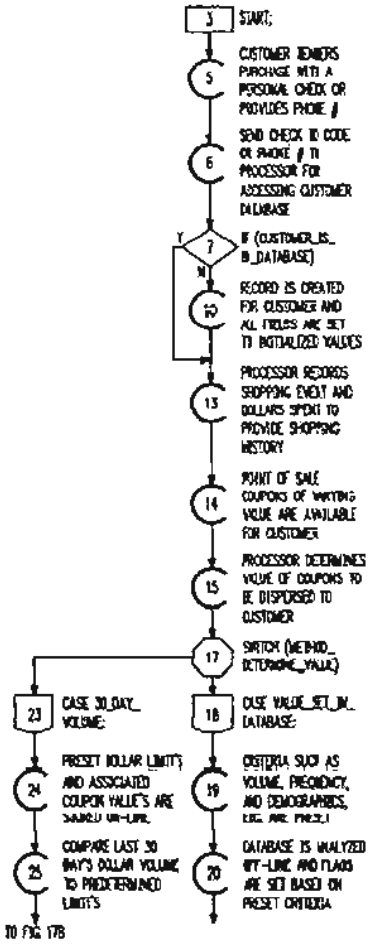
Col. 52 lines 66-68: ""For each activity code read from the Activity Table, the event subtask dispatches (830) to a corresponding activity routine for execution."

Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."

Col. 70 lines 13-16. "A ... technique of distributing coupons utilizes a system to actually print, at the point of sale, coupons bearing the desired information based upon selected criteria."

Col. 70 lines 30-34. "[C]oupon dispensing apparatus ... may be utilized to print the coupons as described in FIG. 16A-B, ... based upon the criteria and the operation of the present invention.

FIG. 17A



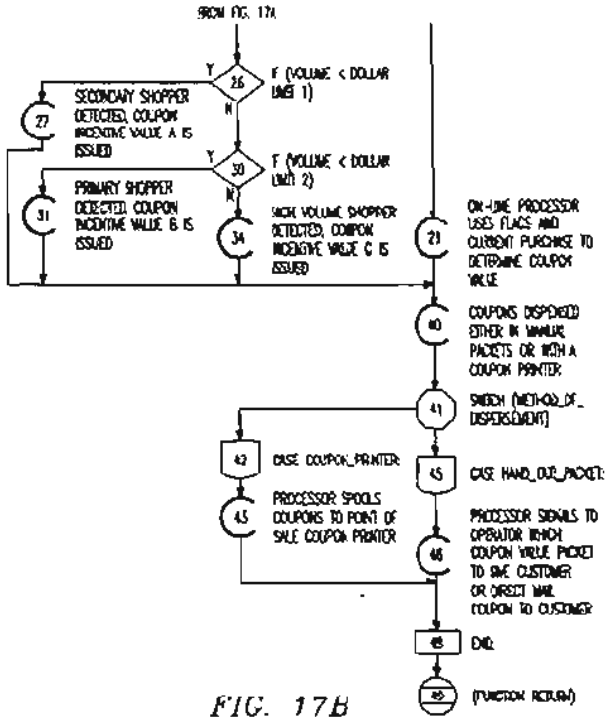


FIG. 17B

Col. 70 line 50 – Col. 71 line 21. "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee. To provide this information, information regarding the particular product and the department of the product is generated by the bar code reader 1130, or through entry through the cash register, and transmitted to the host processor 110. The host processor 110 then identifies each particular product being purchased, compares it against the stored data tables and generates an indication of the type of coupon to be given to the customer.

FIG. 18A

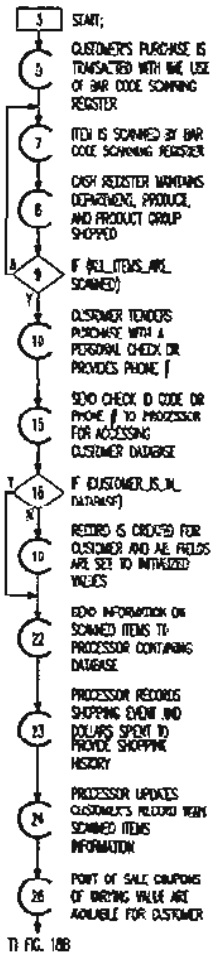


FIG. 18B

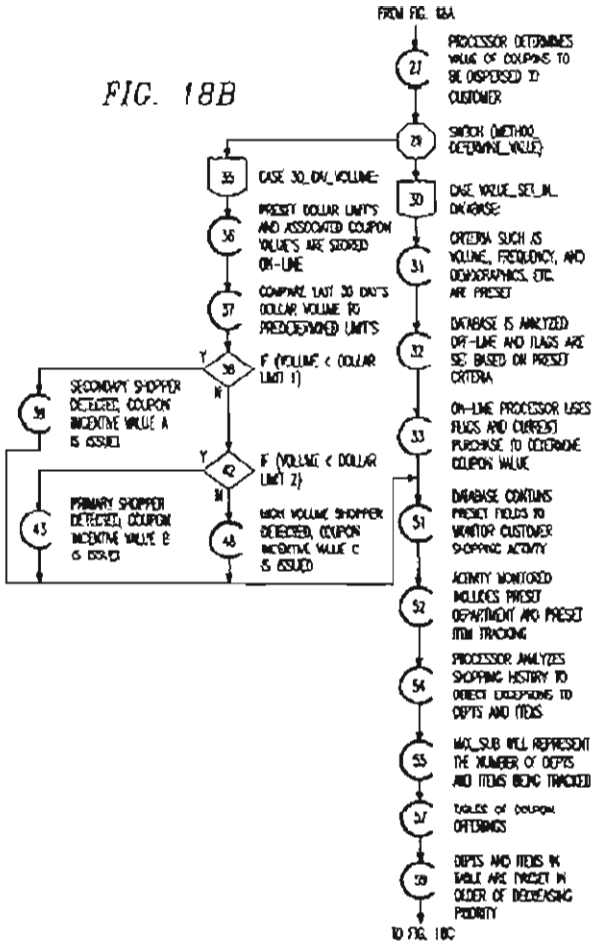
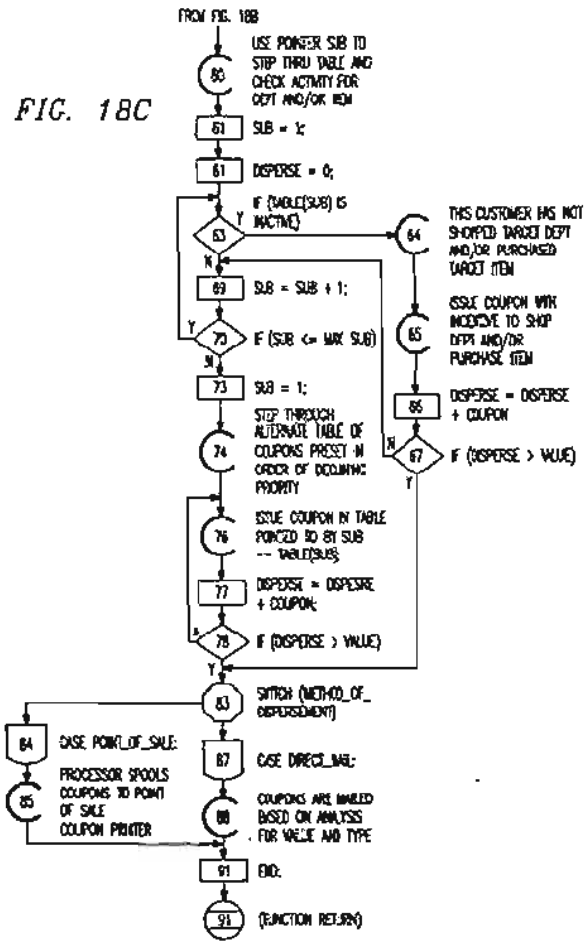


FIG. 18C



Claim 1, element d - my analysis of the Deaton '010 Patent

The Deaton '010 Patent does not perform this Claim element: "automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context."

About Claim 1, c, I argued that the Deaton '010 Patent does not support an event system that can infer or keep track of context. I also argued that, while the system can dispense coupons based in part on information on the customer's frequency of shopping, that this action is not the result of events, inference, or contexts.

VI.D. Claim 2 in view of the Deaton '010 Patent

Claim 2 - language

- "[A system as recited in claim 1,] wherein the inferred context includes information related to at least one phase of the sales process."

Claim 2 - construction

- "context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 2 - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes."
>
> Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations."

> Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. ... A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

Claim 2 - my analysis of the Deaton '010 Patent

The Deaton '010 Patent does not perform this claim element: "wherein the inferred context includes information related to at least one phase of the sales process."

Among other things, while it is clear that, in the Deaton '010 Patent, information relevant to a sales transaction (e.g., new or repeat customer, frequency and dollar volume of customer purchase) is passed among subsystems of the sales system, there is no evidence from the Cook Report or the Deaton '010 Patent that context ["information already existing within the system that becomes relevant upon the occurrence of an event"] was *inferred* using a "logical process by which a factual conclusion is derived from known facts by the application of logical rules". The Deaton '010 Patent does not describe an event manager that "detect[s] . . . infer[s] . . . and automatically initiat[es] an operation" as required by Claim 1 or that any inference step that is part of an event takes place.

VI.D. Claim 3 in view of the Deaton '010 Patent

Claim 3 - language

- "[A system as recited in claim 1,] wherein the inferred context includes information related to whether a previous event has occurred in the sales process.

Claim 3 - construction

- "context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 3 - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes."
>
> Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations."
>
> Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. ... A list of customers is then generated in the database whose last

transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

Claim 3 - my analysis of the Deaton '010 Patent

The Deaton '010 Patent does not perform this claim element: "wherein the inferred context includes information related to whether a previous event has occurred in the sales process."

Among other things, while it is clear that, in the Deaton '010 Patent, a previous event (the customer's history) can result in a later event (like the system prompting the sales clerk to offer the customer a coupon), there is no evidence from the Cook Report or the Deaton '010 Patent that context ["information already existing within the system that becomes relevant upon the occurrence of an event"] was *inferred* using a "logical process by which a factual conclusion is derived from known facts by the application of logical rules". The Deaton '010 Patent does not describe an event manager that "detect[s] . . . infer[s] . . . and automatically initiat[es] an operation" as required by Claim 1 or that any inference step that is part of an event takes place.

VI.D. Claim 5 in view of the Deaton '010 Patent

Claim 5, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 5, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 5, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."
>
> Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.
>
> Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 5, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent performs some of the function of the '525 Patent's "time with customer" subsystem:

> "the time with customer component receives necessary information, for example, pricing and financing data from the data component, and stores information obtained during the time spent with the customer, such as the customer's particular needs and desires in the databases of the data component 116." ['525 Patent, 5:24-30]

The function of the Deaton '010 Patent begins with the customer purchasing an item or items with a check, not before, but during the purchase, the Deaton system can promote additional items.

However, this claim element requires a lead, but, in the Deaton '010 Patent, a consumer who chooses to make a purchase cannot properly be called a lead.

Claim 5, element b - language

- "a lead generation subsystem configured to convert a name to a potential customer."

Claim 5, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 5, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."

Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.

Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 5, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent does not perform the claim element: "a lead generation subsystem configured to convert a name to a potential customer."

Among other things, the Deaton '010 Patent does not contain a lead generation subsystem. The '525 Patent describes a lead generation subsystem as follows

> "The lead generation component 102 is provided to assist sales personnel to identify leads, to generate qualified leads and to begin the sales process. The lead generation component may include, for example, automated systems designed to assist the sales personnel in carrying out such tasks as telemarketing, kiosk presentations, trade show demonstrations, database marketing, electronic advertising, etc. ['525 Patent, 4:22-27]

While the Deaton '010 Patent is capable of promoting additional items to a customer during a sales transaction, the Deaton system does not "convert a name to a potential customer" as required by this claim element, since the customer is already known.

VI.D. Claim 6 in view of the Deaton '010 Patent

Claim 6, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 6, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 6, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the

stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."

Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.

Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 6, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

See discussion for Claim 5a which is incorporated herein by reference.

Claim 6, element b - language

- "an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold."

Claim 6, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 6, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."
>
> Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.
>
> Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might

> determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 6, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent does not perform the claim element: "an order management subsystem configured to convert the sale such that a product or service delivered matches a product or service sold."

Among other things, the Deaton '010 Patent does not contain an order management subsystem. The '525 Patent describes an order management subsystem as follows

> "The order management component 106 assists sales personnel in efficiently managing the critical sales process phase that encompasses the time between the purchase decision and the time the product or service is delivered. For some products or services, this could be a short period of time, while for others it may be many months or even years. The order management component 106 allows the sales personnel to electronically manage changes and provide needed information to the customer during this critical time." ['525 Patent, 5:31-39]

The Deaton '010 Patent aids in making a sale but provides no description of after-sale follow-up.

VI.D. Claim 7 in view of the Deaton '010 Patent

Claim 7, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 7, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 7, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."
>
> Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.
>
> Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 7, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

See discussion for Claim 5a which is incorporated herein by reference.

Claim 7, element b - language

- "a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales."

Claim 7, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 7, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."
>
> Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the

> products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.
>
> Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 7, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent performs the claim element: "a customer retention subsystem configured to convert an existing customer into a lead, so as to generate repeat sales." The Deaton '010 Patent describes generating promotions that could lead to future repeat sales.

VI.D. Claim 8 in view of the Deaton '010 Patent

Claim 8, element a - language

- " [A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer and prompting the buying customer to make a buying decision, so as to close a sale; and"

Claim 8, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 8, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."
>
> Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.
>
> Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 8, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

See discussion for Claim 5a which is incorporated herein by reference.

The Deaton '010 Patent does not perform "prompting the buying customer to make a buying decision, so as to close a sale."

Claim 8, element b - language

- "a self management subsystem configured to assist a salesperson in managing sales information."

Claim 8, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 8, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected customer information among the stores for updating each store's local customer database with the selected global customer information.
>
> Col. 6 lines 25-33. For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database.
>
> Col. 33, lines 55-59. The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

Claim 8, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent does not perform the claim element: "a self management subsystem configured to assist a salesperson in managing sales information."

Among other things, the Deaton '010 Patent does not contain a self management subsystem. The '525 Patent describes a self management subsystem as follows

> "The self management component 110 assists sales personnel to manage their opportunities, time, contacts, schedules, goals, tasks, etc." ['525 Patent, 6:30-32]

There is no description of such a subsystem in the Deaton '010 Patent.

VI.D. Claim 10 in view of the Deaton '010 Patent

Claim 10, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a time with customer subsystem configured to convert a lead to a buying customer, so as to close a sale; and"

Claim 10, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 10, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification),

which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."

Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.

Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 10, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

See discussion for Claim 5a which is incorporated herein by reference.

Claim 10, element b - language

- "a sales management subsystem configured to assist a sales manager in managing a plurality of salespeople." "

Claim 10, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 10, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected customer information among the stores for updating each store's local customer database with the selected global customer information.
>
> Col. 6 lines 25-33. For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database.
>
> Col. 33, lines 55-59. The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

Claim 10, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent does not perform the claim element: "a sales management subsystem configured to assist a sales manager in managing a plurality of salespeople."

Among other things, the Deaton '010 Patent does not contain such a sales management subsystem "to assist a sales manager in managing a plurality of salespeople."

VI.D. Claim 12 in view of the Deaton '010 Patent

Claim 12, element a - language

- "[A system as recited in claim 1, wherein the plurality of subsystems comprises:] a lead management subsystem configured to manage a conversion of a lead to a prospect and of the prospect to a buying customer, and"

Claim 12, element a - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 12, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 1 chart incorporated by reference]
>
> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."
>
> Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III

> detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.
>
> Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 12, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent performs this claim element insofar as its promotion generating subsystem is a lead management subsystem.

Claim 12, element b - language

- "a self management subsystem configured to assist a salesperson in managing sales information."

Claim 12, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 12, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected customer information among

the stores for updating each store's local customer database with the selected global customer information.

Col. 6 lines 25-33. For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database.

Col. 33, lines 55-59. The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

Claim 12, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 1.

The Deaton '010 Patent does not describe a "self-management subsystem". See discussion for Claim 8b which is incorporated herein by reference.

VI.D. Claim 20 in view of the Deaton '010 Patent

Claim 20, preamble - language

- "A method of facilitating a sales process using a computer arrangement having a plurality of subsystems configured to facilitate one or more actions performed during at least one phase of the sales process, the method comprising the steps of:"

Claim 20, preamble - construction

- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, preamble - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this preamble is as follows:

The preamble is not a limitation, nonetheless abstract: "A method and system is disclosed for performing targeted marking on infrequent shoppers."

Col. 3 lines 50-60: "Important aspects of the present invention are to facilitate check transactions by reducing the requirements for customer identification, to enable a store to adopt a risk management approach to check verification based on a customer's transactional history (frequency and dollar volume over specified intervals), and to improve a store's marketing and other customer relations programs by collecting transactional data for that store, both current and historical, that can be used to identify new or infrequent customers, develop customer profiles and to perform targeted marketing."

Col. 9, lines 9-14: "A transaction terminal transmits a request (including a function code identifying the requested function together with other request data) to the transaction processor, which processes the request and returns an appropriate response."

Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

Claim 20, preamble - my analysis of the Deaton '010 Patent

My analysis of the preamble for this method Claim is the same as my analysis for the preamble and Claim 1, element a combined.

Claim 20, element a - language

- "automatically detecting one or more changes in state characteristic of an event occurring in the sales process;"

Claim 20, element a - construction

- "Changes in state characteristic of an event" - "a change in a unique configuration of information within the system that is indicative of the occurrence of an event within the system.

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

The preamble is not a limitation, nonetheless abstract: "A method and system is disclosed for performing targeted marking on infrequent shoppers."

Col. 3 lines 50-60: "Important aspects of the present invention are to facilitate check transactions by reducing the requirements for customer identification, to enable a store to adopt a risk management approach to check verification based on a customer's transactional history (frequency and dollar volume over specified intervals), and to improve a store's marketing and other customer relations programs by collecting transactional data for that store, both current and historical, that can be used to identify new or infrequent customers, develop customer profiles and to perform targeted marketing."

Col. 9, lines 9-14: "A transaction terminal transmits a request (including a function code identifying the requested function together with other request data) to the transaction processor, which processes the request and returns an appropriate response."

Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

Col. 4 lines 12-28: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor. The transaction processor processes the customer information request, using the check identification number to search the customer database and retrieve the corresponding customer record, if any. Based on the customer information in the customer record, or the lack of a customer record, the transaction processor returns an appropriate response (such as check verification status) and marketing response information to the transaction terminal."

Col. 9 lines 15-21: "For example, in the case of check verification, a transaction terminal is used to transmit a verification request-the customer's check ID, the verification function code, and the dollar amount. The transaction processor processes the request, updates the customer database to reflect that transaction, and returns a customer verification status response."

Col. 31 lines 52-56: "Event-driven activities are performed automatically by the check transaction processing system to implement certain functions without operator intervention. The configuration and timing of these activities is a matter of routine design selection."

Claim 20, element a - my analysis of the Deaton '010 Patent

My analysis of this element is the same as my analysis for Claim 1, element b.

The material differences between this element and the "detecting" of Claim 1, element b are that Claim 20 has the additional limitation of "automatically" detecting, and it involves detecting state changes in events occurring in the sales process, as opposed to Claim 1 which involves detecting state changes of events occurring in the system.

Dr. Cook identifies two functions of the system as automatic: "an automatic check reader" and when "the processor interrogates the customer's history and automatically initiates a coupon dispenser subsystem to generate a coupon". However, Dr. Cook does not describe whether or how either of these performs Claim 20, element a: "automatically detecting one or more changes in state characteristic of an event occurring in the sales process;"

Claim 20, element b - language

- "Inferring occurrence of the event and a context in which the event occurred based at least in part on the detected changes in state; and"

Claim 20, element b - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes."

Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations."

Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. A new record is then created in the database for that customer's checking account identification number in response to a processor 110 response indicating the failure to locate, so that the customer's name and address is entered into the record along with a shopping incidence and shopping data being recorded in the database concurrently. A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

Col. 66 lines 13-19: "Alternatively, the system may use dollar amounts to determine an "infrequent shopper". If the system determines that the cumulative dollars spent at the store by a specified customer is equal to or less than a predetermined dollar level within a predetermined time interval, the specified customer is designated as an "infrequent shopper"."

Col. 66 lines 20-30: "As another alternative, the database is maintained with the shopping history for each unique check identification. Each time the system detects a check with a unique check identification number, it is checked against the database. If the last date shopped is prior to a preselected date, a signal is generated and transmitted to the POS. The check is then marked or set aside to be used to create a mailing list. Alternatively, the signal may be used to prompt the store clerk to disburse incentive coupons at the POS."

Col. 66, lines 32-38: "5.4. Marketing Based On Range Of Last Shopping Dates

As noted above, it would be advantageous to be able to selectively market to infrequent shoppers. FIG. 15 illustrated a database building technique to obtain a list of infrequent shoppers based upon their last shopping date.

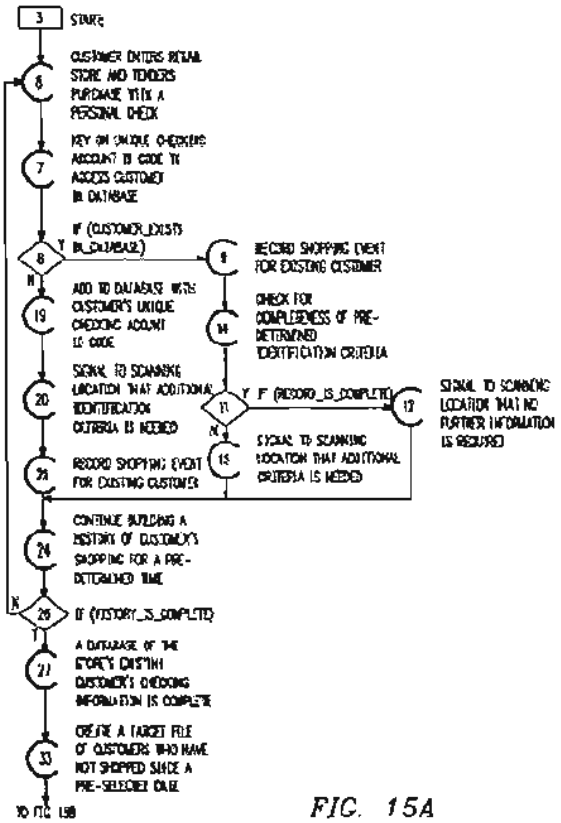
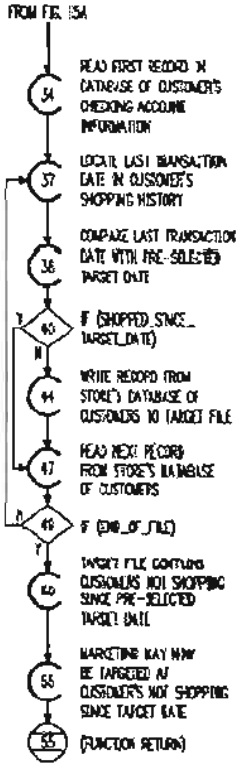


FIG. 15A



FIC. 15B

Col. 66, lines 32-38: "FIG. 16 illustrates a database building technique to provide a list of a store's customers whose last shopping date falls within a preselected shopping date range. ... In accordance with the techniques shown in FIG. 16, a customer's checking account identification number is entered as a unique customer identification code by the check reader 119. Host processor 110 is programmed to store a database which includes a plurality of unique customer identification codes and check cashing history of prior customers of the retail establishment, including date of check transactions. The processor then compares each newly entered unique customer identification code against the stored database. A signal is generated to indicate the presence of a complete customer information record or of an incomplete customer information record as a result of the comparison. A second database is then generated which lists customers whose last unique customer identification code entry date falls within a preselected date range. A promotion may then be selectively offered by the retail establishment to customers within the second database. For example, coupons or other enticements may be mailed directly to the customers on the second database, or distributed at the POS."

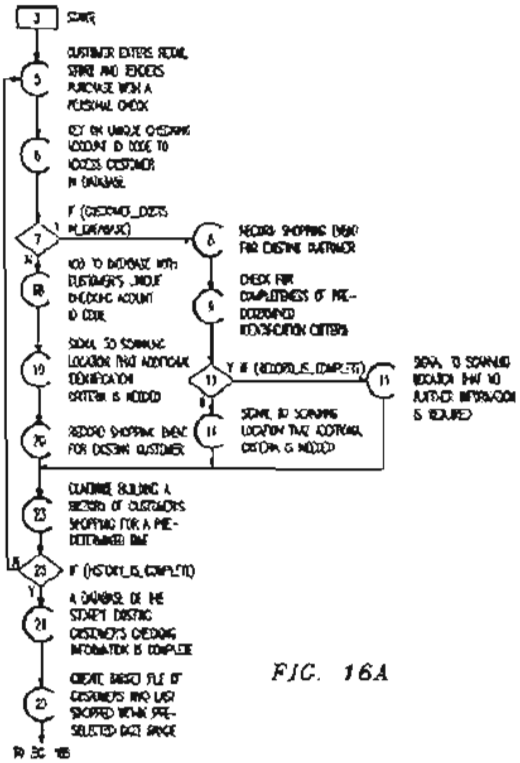


FIG. 16A

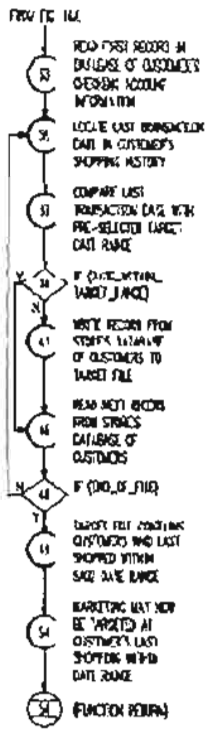


FIG. 16B

Claim 20, element b - my analysis of the Deaton '010 Patent

My analysis of this element for this method Claim is the same as my analysis for system Claim 1, element c.

Claim 20, element c - language

- "automatically initiating an operation in one or more particular subsystems of the computer to facilitate a new action based on the inferred context";

Claim 20, element c - construction

- "Context" - "information already existing within the system that becomes relevant upon the occurrence of an event";
- "Inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "Inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";
- "Subsystem" - "a system that is part of a larger system";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 20, element c - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

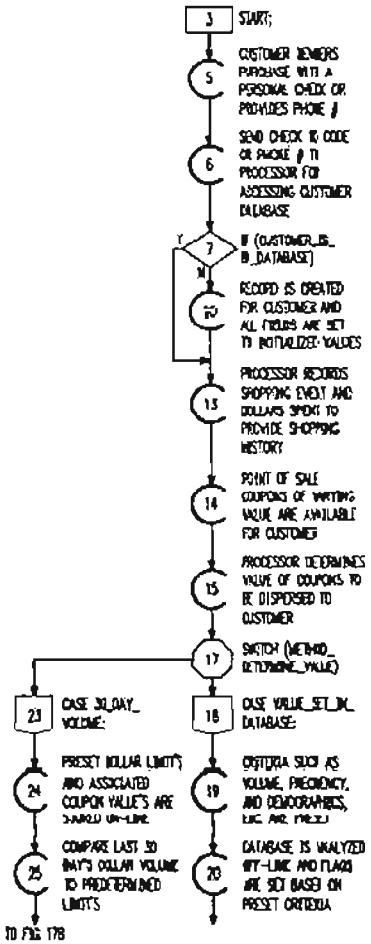
> Col. 52 lines 31-39: "At the appropriate event time, the Event Manager Task spawns the event subtask, which receives (822) the current record from the Event Table. The current event record includes a current event time and an activity pointer to each of up to 10 associated activities identified in the Activity Table. The event subtask sequentially executes each activity associated with the current event time."
>
> Col. 52 lines 66-68: "For each activity code read from the Activity Table, the event subtask dispatches (830) to a corresponding activity routine for execution."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or' other criteria based

upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."

Col. 70 lines 13-16: "A ... technique of distributing coupons utilizes a system to actually print, at the point of sale, coupons bearing the desired information based upon selected criteria."

Col. 70 lines 30-34: "[C]oupon dispensing apparatus ... may be utilized to print the coupons as described in FIG. 16A-B, ... based upon the criteria and the operation of the present invention.

FIG. 17A



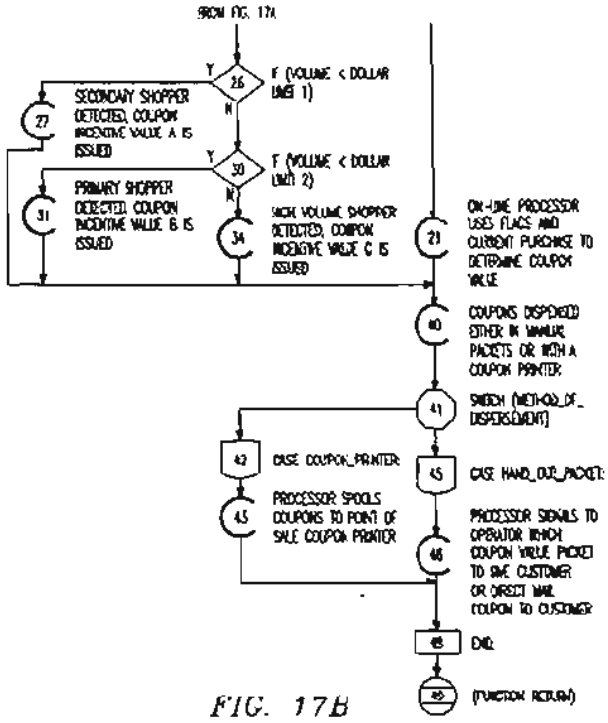


FIG. 17B

Col. 70 line 50 – Col. 71 line 21. "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping. Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee. To provide this information, information regarding the particular product and the department of the product is generated by the bar code reader 1130, or through entry through the cash register, and transmitted to the host processor 110. The host processor 110 then identifies each particular product being purchased, compares it against the stored data tables and generates an indication of the type of coupon to be given to the customer.

FIG. 18A

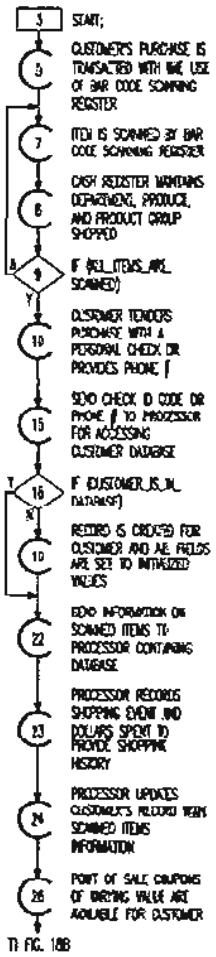


FIG. 18B

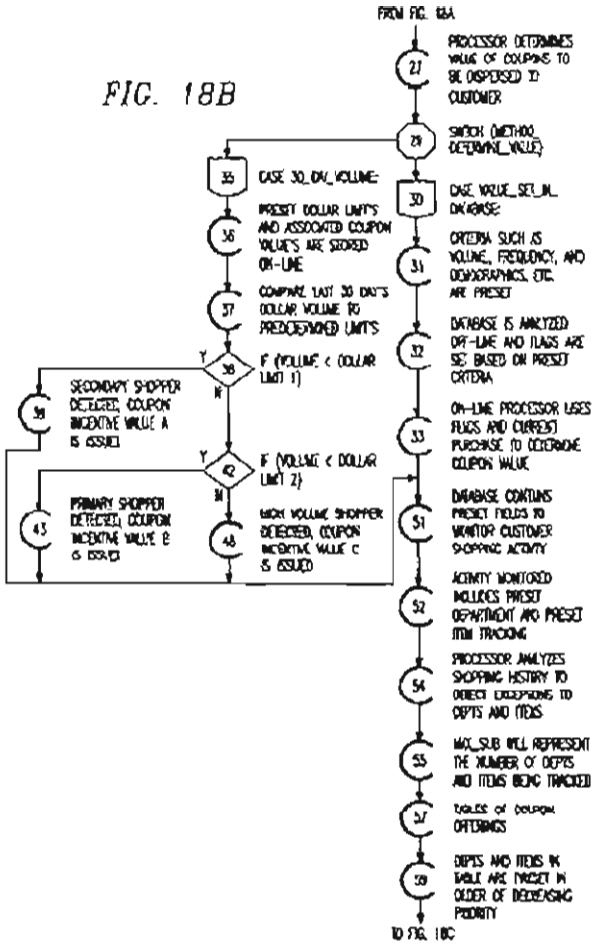
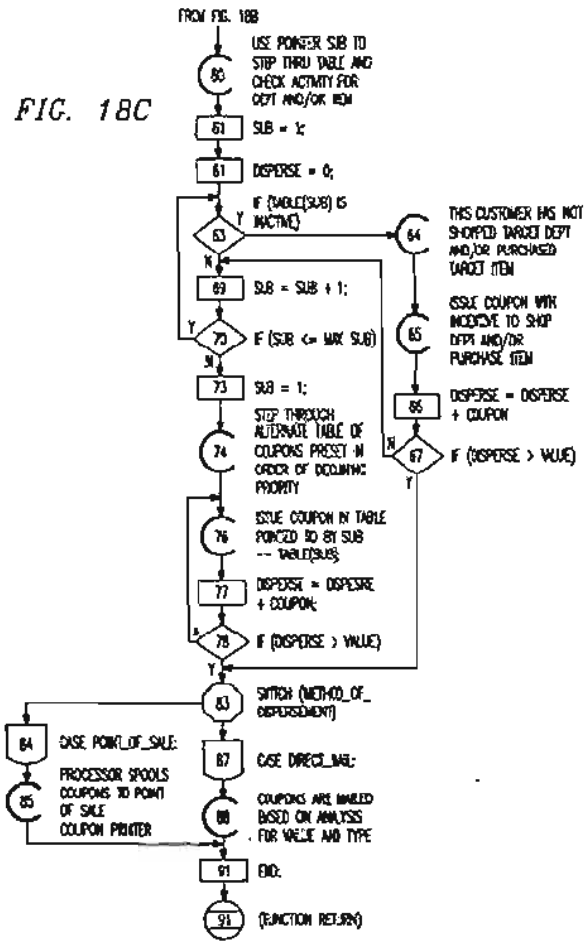


FIG. 18C



Claim 20, element c - my analysis of the Deaton '010 Patent

My analysis of this element is the same as my analysis for Claim 1, element d.

VI.D. Claim 24 in view of the Deaton '010 Patent

Claim 24 - language

- "A method as recited in claim 20, wherein the inferred context includes information related to at least one phase of the sales process."

Claim 24 - construction

- "context" - "information already existing within the system that becomes relevant upon the occurrence of an event";

- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";

- "inferring . . . a context in which the event occurred" - "logical process by which the fact that information already existing within the system that becomes relevant upon the occurrence of an event is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 24 - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> [Claim 20 chart incorporated by reference]
>
> Col. 5, lines 19-27: "Moreover, because the check transactional data is generated and maintained locally, it provides significant information about the store's customers over and above the information necessary for check verification risk management. New customers are readily identified, and frequency and dollar volume information may be used to establish customer profiles and to target advertising, marketing and promotional programs, and for other customer relations purposes."
>
> Col. 6, lines 10-24: "In addition to check verification status, the system collects and accumulates selected additional transactional data, including frequency and dollar amounts over specified intervals (such as Day/Week/Month/Quarter/Total) and other historical information such as departments shopped, products purchased and the like, thus allowing the store to adopt risk management approach to check verification tailored to the store's particular customer and financial situation by conditioning check authorization on meeting certain selected transactional limits regardless of customer status (the CALL MANAGER response), and allowing the store to develop customer profiles and to target advertising, marketing and promotions, and otherwise improve customer relations."
>
> Col. 65 line 59 – Col. 66 line 12: "The checking account identification number is entered into processor 110 which contain a database that maintains customer records including the customer's name and address, the checking account identification number, and customer shopping habits and transactional data over a preselected time interval. The checking account identification number is compared with the database. A response is generated by the processor 110 to signal the presence of the customer's checking account identification number or the failure to locate the customer's checking account identification number. ... A list of customers is then generated in the database whose last transaction date is prior to a preselected interval of inactivity so that grouping or subgrouping of customers is available for marketing efforts."

Claim 24 - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 20.

See discussion for Claim 2 which is incorporated herein by reference.

VI.D. Claim 34 in view of the Deaton '010 Patent

Claim 34, element a - language

- "[A method as recited in claim 20, further comprising the steps of:] inferring occurrence of an event while converting a lead to a buying customer; and"

Claim 34, element a - construction

- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 34, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

[Claim 20 chart incorporated by reference]

Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to

reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."

Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.

Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 34, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 20.

See discussion for Claims 2 and 5b which are incorporated herein by reference. In Deaton '010, there is no event described that converts a lead to a buying customer which involves "inferring occurrence of an event," that is, following a ["logical process by which the fact that an event has occurred is derived by application of logical rules"]

Claim 34, element b - language

- "using the particular subsystem to convert an existing customer into a lead, so as to generate repeat sales."

Claim 34, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 34, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."
>
> Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."
>
> Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.
>
> Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not

purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 34, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 20.

The Deaton '010 Patent performs this claim element.

VI.D. Claim 35 in view of the Deaton '010 Patent

Claim 35, element a - language

- "[A method as recited in claim 20, further comprising the steps of:] inferring occurrence of an event while converting a lead to a buying customer and prompting the buying customer to make a buying decision; and"

Claim 35, element a - construction

- "inferring" - "logical process by which a factual conclusion is derived from known facts by the application of logical rules";
- "inferring occurrence of an event" - "logical process by which the fact that an event has occurred is derived by application of logical rules";

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 35, element a - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

[Claim 20 chart incorporated by reference]

Col. 4 lines 12-19: "The system includes one or more transaction terminals, coupled to a transaction processor that stores the customer database. A transaction terminal is used to transmit a customer information request (such as for check transaction verification), which includes an automatically read customer's check identification number, from the point of sale (POS) to the transaction processor."

Col. 67 line 59 – Col. 68 line 12. "FIG. 17 illustrates a program flow chart of a marketing technique utilizing the present invention, wherein coupons may be distributed to customers based upon the frequency of shopping, dollar volume or other criteria based upon the shopping habits of the customer. ... The technique shown in FIG. 17 enables the stores to issue coupons and other inducements to customers based upon the shopping habits of the customer. For example, the technique shown in FIG. 17 enables the store to reward a high volume shopper in order to hold on to especially good shoppers. Alternatively, the store can award a lesser incentive package to good shoppers in order to maintain a consistency such that each shopper receives a coupon package. Importantly, the technique enables a high incentive coupon pack to be delivered to a customer who is a secondary shopper or who is an infrequent shopper, in order to make them a primary shopper."

Col. 70 line 50 – Col. 71 line 21: "FIG. 18A-C illustrates a technique for generating coupons based upon the particular transaction currently being accomplished by the customer. The technique of FIG. 18 detects the particular store departments in which the products being purchased are located. ... For example, the technique shown in FIG. III detects whether or not items have been purchased from the meat department, dairy department or deli. Based upon data stored within the computer, the decision is then made as to whether to award a coupon and what type of coupon to award. For example, if the data illustrates that over a period of time a shopper shows a consistent failure to shop at the delicatessen, then when the customer's check identification is scanned into the check reader 119, the processor 110 pulls up the customer's history and generates a coupon to induce the customer to shop at the delicatessen the next time the customer shops. This inducing can be done by providing the customer with a very high value coupon used only for deli shopping.

Similarly, the stored data in processor 110 may contain information regarding particular product groups. If it is determined that the customer is a frequent shopper but does not purchase coffee, the data may determine that a coupon providing a large discount on coffee would be suitable to give to the customer. Alternatively, the system might determine that the customer had no history of buying a specific brand of coffee, and incentive coupons can be distributed for that brand of coffee."

Claim 35, element a - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 20.

See discussion for Claim 34a which is incorporated herein by reference.

The Deaton '010 Patent does not perform "prompting the buying customer to make a buying decision, so as to close a sale".

Claim 35, element b - language

- "using the particular subsystem to assist a salesperson in managing sales information."

Claim 35, element b - construction

- "subsystem" - "a system that is part of a larger system"

My analysis construes the other terms of this element in accordance with their ordinary and customary meaning to one of ordinary skill in the art during the time frame of October 1995.

Claim 35, element b - analysis by Dr. Cook of the Deaton '010 Patent

Dr. Cook's analysis of this element is as follows:

> Col. 5 line 48-55. An Event Manager Task that implements system activities such as backup and database purge, and in the case of multiple-store systems, implements host/remote communications activities to transfer selected customer information among the stores for updating each store's local customer database with the selected global customer information.
>
> Col. 6 lines 25-33. For multiple-store businesses, the system can use automatic host/remote transfer of selected customer information to upgrade the local customer database at each store with global customer information (such as those customers with CAUTION and NEGATIVE check verification status), thereby maximizing protection against bad checks while maintaining the local character of the store's customer database.
>
> Col. 33, lines 55-59. The check transaction processing system allows a store to build and maintain a customer database containing customer information useful for identifying new customers and developing customer profiles;

Claim 35, element b - my analysis of the Deaton '010 Patent

See claim elements missing from Claim 20.

The Deaton '010 Patent does not perform "using the particular subsystem to assist a salesperson in managing sales information." See discussion for Claim 12b which is incorporated herein by reference.